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ABSTRACT

THIS REPORT DESCRIBES THE PRIMARY AND SECONDARY OBJECTIVES OF THE NURSERY SCHOOL PROJECT AND THE METHODS AND PROCEDURES USED IN THE PROGRAM. DEMOGRAPHIC INFORMATION IS SUPPLIED FOR THE 30 3- AND 4-YEAR-OLDS WHO WERE ENROLLED. THE SCHEDULE AND TENTATIVE LESSON PLANS EMPHASIZE FREE CHOICE ACTIVITIES, GROUP TIME, AND OUTDOOR PLAY. PLANNING AND IMPLEMENTATION OF THE PROGRAM ARE CONSIDERED. A SECTION ON THE DEVELOPMENT OF CURRICULUM MATERIALS GIVES SPECIFIC SUGGESTIONS FOR LEARNING ACTIVITIES DURING SNACK AND LUNCH TIME AND METHODS FOR LEARNING CONCEPTS SUCH AS "ROUND," UNDERSTANDING OPPOSITES LIKE FAST AND SLOW, USING CONJUNCTIONS, AND PLAYING WITH ALPHABET BLOCKS OR PICTURE LOTTO GAMES. TO ENRICH THE CHILDREN'S HOME ENVIRONMENTS, A MOBILE INSTRUCTIONAL LIBRARY IS USED FOR HOME VISITS. THE SCHOOL FUNCTIONS AS A DEMONSTRATION CENTER, AND METHODS OF OBSERVATION AND AVAILABLE INFORMATION MATERIALS ARE EXPLAINED. A RESUME OF THE TESTING AND DATA COLLECTION DESCRIBES IN DETAIL THE USE OF PRE- AND POSTTESTS, RATING SCALES, OBSERVATIONS, AND INVENTORIES. A LIST OF ALL PERSONNEL IN THE NURSERY SCHOOL CONCLUDES THE REPORT. (DR)

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NEW NURSERY SCHOOL RESEARCH PROJECT
ANNUAL PROGRESS REPORT

OCTOBER 1, 1968 to SEPTEMBER 30, 1969

Research Grant Number: B99-4743
Research and Evaluation
Project Head Start

Project Director: *Dr. Edward J. Kelly*

Director of Instruction: *Mrs. Oralie McAfee*

SCHOOL OF EDUCATION
COLORADO STATE COLLEGE
GREELEY, COLORADO

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Included in this report are evaluation instruments, organization guides, and curriculum materials which have been prepared during the year. As they were prepared, they were mimeographed for staff use and to give to people requesting samples of current work. These sections have not been restenciled and repaged for inclusion here. Instead, they are grouped, with each grouping headed by a colored sheet of paper as indicated above.

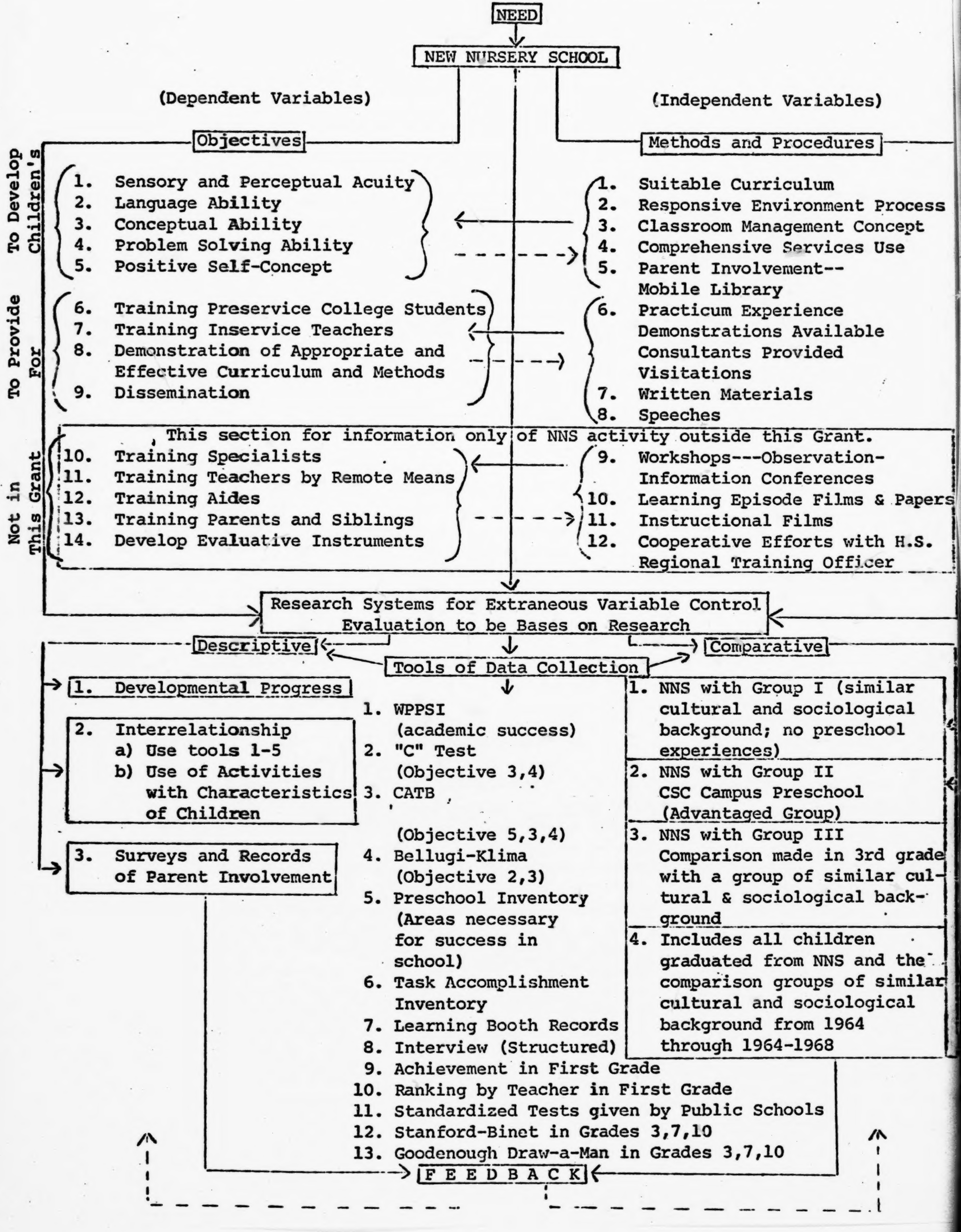
I. DESCRIPTION OF THE NEW NURSERY SCHOOL RESEARCH PROJECT

Children are often helped to succeed in school because of the advantages of their home environment; they can also fail if there are too many disadvantages in that environment. All too many families are poor, have a low educational level, a culture quite different from that of the school, and lack the knowledge and means to encourage their children's learning. Such families almost always pass educational handicaps on to their children--language that is inadequate and speech that is hard to understand, limited experiences, a lack of simple concepts, and little ability or desire to solve problems. Perhaps the most crippling heritage of all is lack of assurance and confidence in their own abilities. The New Nursery School, Colorado State College, is attempting to help meet this need by developing, demonstrating, and evaluating curriculum and procedures suitable for Head Start classrooms, and evaluating their effectiveness over a period of time.

In the program year 1968-69, several projects were undertaken to extend and evaluate work done in previous years. Extension of educational materials and teaching strategies to the home through a mobile instructional library/home visitation program was begun. A practical and simple method of evaluating children's accomplishment of selected tasks was developed, used, and revised (Task Accomplishment Inventories). A method of evaluating young children's comprehension of key grammatical elements, developed by Dr. Ursula Bellugi-Klima, was reorganized, augmented, and used. The classroom was systematically observed and the use of classroom equipment and participation in classroom activities tallied.

The schematic flow-chart on the next page presenting a systems approach to the New Nursery School Project is a synthesis-analysis summary of the processes and products involved.

SYSTEMS APPROACH TO PRESENTATION OF NEW NURSERY SCHOOL PROJECT



NEED

NEW NURSERY SCHOOL

(Dependent Variables)

(Independent Variables)

Objectives

To Develop Children's

1. Sensory and Perceptual Acuity
2. Language Ability
3. Conceptual Ability
4. Problem Solving Ability
5. Positive Self-Concept

To Provide For

6. Training Preservice College Students
7. Training Inservice Teachers
8. Demonstration of Appropriate and Effective Curriculum and Methods
9. Dissemination

Methods and Procedures

1. Suitable Curriculum
2. Responsive Environment Process
3. Classroom Management Concept
4. Comprehensive Services Use
5. Parent Involvement--Mobile Library
6. Practicum Experience
   Demonstrations Available
   Consultants Provided
   Visitations
7. Written Materials
8. Speeches

This section for information only of NNS activity outside this Grant.

Not in This Grant

10. Training Specialists
11. Training Teachers by Remote Means
12. Training Aides
13. Training Parents and Siblings
14. Develop Evaluative Instruments

9. Workshops---Observation-Information Conferences
10. Learning Episode Films & Papers
11. Instructional Films
12. Cooperative Efforts with H.S. Regional Training Officer

Research Systems for Extraneous Variable Control
Evaluation to be Bases on Research

Descriptive

1. Developmental Progress
2. Interrelationship
   a) Use tools 1-5
   b) Use of Activities with Characteristics of Children
3. Surveys and Records of Parent Involvement

Tools of Data Collection

1. WPPSI (academic success)
2. "C" Test (Objective 3,4)
3. CATB (Objective 5,3,4)
4. Bellugi-Klima (Objective 2,3)
5. Preschool Inventory (Areas necessary for success in school)
6. Task Accomplishment Inventory
7. Learning Booth Records
8. Interview (Structured)
9. Achievement in First Grade
10. Ranking by Teacher in First Grade
11. Standardized Tests given by Public Schools
12. Stanford-Binet in Grades 3,7,10
13. Goodenough Draw-a-Man in Grades 3,7,10

Comparative

1. NNS with Group I (similar cultural and sociological background; no preschool experiences)
2. NNS with Group II CSC Campus Preschool (Advantaged Group)
3. NNS with Group III Comparison made in 3rd grade with a group of similar cultural & sociological background
4. Includes all children graduated from NNS and the comparison groups of similar cultural and sociological background from 1964 through 1964-1968

F E E D B A C K

DEPENDENT VARIABLES

(Objectives)

The capabilities desired of the children after completing the school experiences are defined under five primary objectives. (Examples only are listed under each objective.)

1. Increasing sensory and perceptual acuity
   - A. The child is able to use all his senses as a means of finding out about his environment.
   - B. The child begins to interpret accurately what his senses encounter.
2. Developing language ability.
   - A. The child is able to label and describe objects and actions in his environment.
   - B. The child is able to use words to remember and predict events, to contrast and compare.
   - C. The child is able to communicate in words and sentences which can be understood by others.
   - D. The child is able to comprehend and express certain fundamental concepts which seem to expedite further learning (see below).
3. Developing conceptual ability.
   - A. The child is able to comprehend and express concepts of:

     Color
     Shape (including letters and numerals)
     Size (including relative size)
     Number
     Relative and Contrasting Location (in front of; behind; in; out)
     Contrasting or Opposing Conditions (hot-cold; with-without; same-different; and-or)
     Relative Number (more-fewer)
     Relative Mass or Volume (more-less)
     Relative Weight
4. Developing problem solving ability.
   - A. The child is able to work on his own to attempt to solve problems.

    B. The child is able to use certain process of learning which enable him to solve problems, such as sorting and classifying, ordering, patterning, counting, making associations, eliminating known responses to arrive at an unknown, identifying which piece is missing out of a matrix or puzzle, and so forth.

5. Developing a positive self-concept.
    A. The child responds to his own first, last, and full name.
    B. The child is able to say his first, last, and full name on request.
    C. The child is able to participate in classroom activities at his own pace and with his own "style" of operating.

The secondary objectives are:

6. Training preservice college students: Each year at least six graduate and undergraduate college students receive practical experience working with young disadvantaged children.
7. Training inservice teachers: The New Nursery School Staff is available for consultation and demonstration.
8. Demonstration of appropriate and effective curricula and methods: Observation and demonstration up to three days is available with no charge to all interested people.
9. Dissemination of information is effected through films, written materials, speeches, and workshops.

INDEPENDENT VARIABLES

(Methods)

The variables listed as primary and secondary objectives are dependent upon the methods and procedures listed as independent variables. Briefly described, these independent variables are:

1. The child is encouraged to experiment, explore and make discoveries on his own.
2. The child is actively, physically involved in the learning process.
3. The child is encouraged to choose the activities in which he wants to participate, and to set his own pace and style in working at them.
4. The child participates in learning activities because he is interested and wants to learn, not because of external rewards or punishments.

All teachers and assistants in the classroom are trained in the methods used in this and other school activities.

II. DESCRIPTION OF POPULATION

Thirty (30) children are enrolled, fifteen (15) in each of two (2) three hour and fifteen minute sessions.

They meet at least three of the following qualifying conditions:

1. Economic conditions at or below Head Start economic guidelines.
2. Education level of the parents is at or below 9th grade.
3. Receiving assistance from welfare and other agencies.
4. History of older siblings having school difficulty.
5. Indication of deviant behavior within the family.
6. One or both parents absent from the home.
7. "Substandard quality" speech of parent or parent-substitute, as defined by lack of fluency, use of dialect, and primary language other than English.

In addition, an attempt is made to maintain the following age and sex balance:

15 boys and 15 girls

15 four-year-olds (four before September 10th of their last year in nursery school)

15 three-year-olds (three before September 10th of their first year in nursery school) September 10 is the cut-off date for entering public school kindergarten in Greeley.

The following demographic information is given for 28 children from 25 families. Two children moved late in the year and were not replaced.

DEMOGRAPHIC INFORMATION

INDIVIDUAL

AGE:

3 years old	4 years old
14	14

SEX:

Female	Male
14	14

ETHNIC ORIGIN:*

Anglo	Spanish	Negro
1	24	2

HOME MILIEU

PARENTS IN HOME:

Father/Mother	Mother	Father	Foster	Grandparents
21	4	0	1	2

AVERAGE NUMBER OF CHILDREN IN HOME: 4.39

MEAN EDUCATIONAL LEVEL OF PARENTS: (Some parents received schooling in Mexico)

Both Parents At Home			Total Group		
Father	Mother	Total Mean	Father	Mother	Total Mean
6.86	7.36	7.11	6.72	7.03	6.89

LANGUAGE SPOKEN IN HOME:

English	English-Spanish	Spanish
11	13	4

PARENTAL OCCUPATION (Many of these jobs are seasonal--tied to weather or need for a particular type of construction)

FATHER:

Truck Driver	Brick Layer	Meat Worker	Roofer	Farm Worker
1	2	3	1	2

Title V	Janitor	Construction
2	1	9 (cement work, ditch lining, etc.)

MOTHER:

Housekeeping	Factory	Hospital Work	Home Visitor New Nursery School
1	2	1	2

Some mothers engage in seasonal field work.

WELFARE STATUS: 6 families receive direct welfare assistance.

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*As in any attempt to categorize people, difficulties are encountered. The terms used here are those ordinarily used in the Greeley area.

Nine of the children came from the Spanish Colony two miles northwest of Greeley. The others came primarily from the northeast side of the city of Greeley. Few are close enough to walk; a small school bus provides transportation.

Almost all live in single family dwellings, however small. Fewer than half, however, have telephones.

Close family ties are still maintained in the Spanish community in Greeley, and there are complex interrelationships. As a result, many of the children attending school are cousins. While this sometimes presents certain problems in the classroom, the chances of effecting changes in attitude toward education among the whole family are greater.

Although there is considerable mobility of the families within the northeast area of Greeley, there is little movement out of the area. In the Spanish Colony, the resident population is quite stable. From both areas, younger brothers and sisters of children who attended school in 1964, the first year the Nursery School operated, are presently attending. Resident families are given preference in enrollment so that the longitudinal study necessary for evaluating effectiveness can be carried out. The isolation and family disintegration often reported as characteristic of low-income urban environments are evident in only a few of the families.

Some of the children are normal in speech and conceptual development and will doubtless succeed in school unless motivation, interest, money, or other variables intervene. Others, however, have severe language and conceptual deficits. Several of the children entered at age three with English almost impossible to understand; their Spanish was no better. "Mine" and a vehement "Unh-unh!" comprised the vocabulary of one. Another's sentences consisted of "Mama" followed by a string of unintelligible vowel sounds. A third had many more words, but articulated so poorly and incompletely that the speech could not be understood without a shared context. Others had other specific manifestations of language retardation. In all these children the drive to communicate was strong. They would make valiant efforts to understand and be understood through words, and their pleasure when communication was accomplished pervaded the entire group. Some became quite conscious of their growing ability with language. One girl playing a game with colors repeated with each new color "I can say that word--white."

Other children were much less handicapped in language, but required special control and guidance techniques. In several cases, the same behavior patterns were evident in siblings. Because some of the difficulties stemmed from activities related to later school expectations, future difficulties may be encountered. For example, several children could perform quite well in conversation and action. When asked a direct question, however, they either refused to answer or manifested inappropriate behavior.

Obvious evidence of malnourishment is manifested only in tooth decay. However, several children received their first immunizations of any kind at the school.

III. PLANNING AND IMPLEMENTING THE DAILY PROGRAM

The schedule and tentative lesson plans included as illustrations are very flexible. The free choice activities are the ones being emphasized on a particular day, and are in addition to the classroom equipment which is available most of the time, such as blocks, books, puzzles, and so forth. A teaching team who had been together for some time probably would not need such detailed plans under each activity.

However, since the same activities and equipment are used in varying ways throughout the year to keep interest high, and to keep children working at the "cutting edge" of their knowledge, some notes concerning the expected use and resultant learning are certainly in order.

The section titled "Planning the Preschool Program" gives specific guides to the teacher. It is to be published by the National Association for the Education of Young Children in Fall, 1969.

NEW NURSERY SCHOOL DAILY SCHEDULE
3 hours & 15 minutes

Morning - 8:45-12:00

8:45 - 10:30 a.m. FREE CHOICE ACTIVITIES
(Some will be planned learning situations based on the activities)

Snacks in the art area; then art work such as painting, drawing, cutting and pasting
Blocks, trucks, and animals
"Dress-ups"
Manipulative toys, puzzles, and small group or individual games
Informal reading, looking at books, flannel board stories
Language Master

As children lose interest in equipment, child and/or teacher can put it away and take out something else.

10:15 to 10:45 GROUP TIME

The time for beginning of group time is quite flexible, as is the length of the group activity.

Most of the children are in the quiet room for songs, finger plays, stories, or other suitable group activities.

A child who does not wish to participate should stay in the other room. Have books, dough, rubber puzzles, or other quiet activities out.

10:45 or 11:00 a.m. OUTDOOR PLAY

Free choice activities with a variety of equipment, for both active and quiet play. Some activities will be planned learning situations.

If the children are unable to go outside, have free choice activities indoors, with perhaps more planned teacher-child interaction, such as
- Clay or dough in the art area
- Lotto games
- Records
- Action games, rhythms, or records for those interested

In this part of the day the children seem to need more assistance with their play if they have to stay inside.

11:30 - 12:00 Noon LUNCH

Afternoon - 12:00-3:15

12:00 - 12:30 p.m. LUNCH

12:30 p.m. FREE CHOICE ACTIVITIES (as listed above)
SNACKS

2:15 or 2:30 p.m. GROUP TIME
OUTDOOR PLAY (or) SECOND FREE CHOICE

SAMPLE LESSON PLAN

(Latter part of the year)

Emphases:

1. Thick - thin
2. Relative location
3. Color - saying color names, abstract use of color names
4. Classification and grouping
5. Shape
6. Relative size

Snacks:

Five to six children at a time. As a child finishes, tell him, *Go tell Benny it's time for snacks (or juice).*

(Banana slices and graham crackers) *Do you want thick or thin slices of banana?* ... (demonstrate) *How many thin (thick) slices do you want?* Have the child count or help you count. Talk about banana pudding for lunch. (Miss Martinez)

Free Choice Activities:

1. Art - portable chalkboards on the table. Offer choice of several colors of chalk. *Tell me what color chalk you want.* For those ready, ask some "extension" questions, such as, *If you make a line on the chalkboard with that chalk, what color will the line be? What color is the eraser going to be when you finish erasing? What other things are red?* (Miss Martinez)
2. Favorite stories on cartridge tape. Start with "Curious George" books to help Pat get started on a constructive day.
3. Sorting evergreen cones. Put them in a large pan, and have several smaller pans close by. Refer to "cones," not pine cones.

There are several kinds of cones. Help the children remember the walks when we found some cones.

Observe to see what each child's reaction to this unstructured material is. If he sorts on his own, fine. If he can't do it, put two or three of one kind in each pan, to see if that will get him started. If not, try, *Put the cones like this one in this pan, and the cones like that one in that pan.* Mrs. Johnson - supervise this and stories on tape.

4. After cones, put larger and smaller colored counting cubes out. Try some patterns - color, size, or both. Might be opportunity here for relative location - smaller cubes on top of larger; red cubes under the blue cubes. Try to get the children saying colors, sizes, relative location.
5. "Gumbies" in block area. "In the truck," "inside the corral," "under the bridge," and other terms of relative location. Watch for opportunities to bring in "thick" and "thin" using the two thicknesses of blocks.
6. Cut out numerals with pegs. Use pattern board to help with order of numerals. Put on the floor in corner.
7. *Which one doesn't belong in this group?* using the groupings assembled in plastic sandwich boxes. After child has made decision, ask, *Why?*
8. Individual flannel boards, geometric shape, yarn. Use items seven and eight above after either cubes or cut out numerals, depending on interest.
9. Typing Booth Activities.

Transition:

1. Story records in reading area. Children take turns holding book.

2. Puppets for those who are not listening to records or straightening room, - let children take turns hiding brother, sister, mama. Others say where puppet is hiding - *under the table, behind him.* (Miss Martinez)

Group Time:

Songs and dancing with autoharp to draw group together and help relax:

"Dance around in time to the music"
"Jump up and down"

Let the children say what they want to do in time to the music. End with clapping hands very softly.

Bring out Alfred, the stuffed boy doll who likes to play tricks on the real little boy he belongs to. Have it in a box iwth a lid. (The children have played with Alfred before and named him)

"One day Alfred's owner put him into his box, put the lid on, went out to play. Alfred was so lonely there in the box. Then he decided he'd play a trick on the little boy who had left him in the box. He'd hide! Then he thought and thought. Where could he hide?"

Elicit hiding places from the children. If possible, demonstrate by putting Alfred where they suggest - "in the book cabinet," "behind Ruth's back," "under the block shelves," etc. If some suggestions are not good hiding places, discuss why they are not.

End the story with Alfred's hiding inside the box. The little boy comes back to find him, and they go outside to play together.

To send children outside, sing:

"Margaret Trujillo, you may go out,"

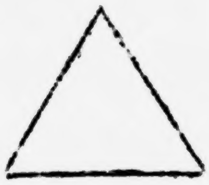
"Joseph Barnett, you may go out,"

"Ruthie Martin, you may go out."

"Go outside to play" - Tune: Mulberry Bush

Outdoors:

1. Water play - funnels, pitchers, meat basters, syringes, large and small mouth plastic containers.
2. Take children three or four at a time to walk outside fence, look at children inside yard. Walk to porch to look to see the inside of the school while they are on the outside.
3. All large equipment out. Verbal interaction should encourage children to say what they are doing or planning to do.
4.



Drawn on the sidewalk with chalk. "Hopscotch" emphasizing relative location.

Lunch:

Have a couple of bananas so children can remember the bananas they had at snack time, and recognize the banana pudding. Remember to ask children where they are sitting --- "beside Mr. Barnes," "between Elaine and Benny," "across from Mr. Barnes," "at the end of the table."

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Colorado State College

PLANNING THE PRESCHOOL PROGRAM

A suitable curriculum for early childhood education cannot be contained in a workbook, textbook, kit, or program guide. It must be planned by the teacher or teachers with the needs of a particular group, and the particular children in the group, in mind.

To some, written plans have the taint of rigidity and regimentation, antithetical to the notion of a curriculum based on children's interests and needs. And of course they can be if slavishly followed or used as a "course of study" which is identical from year to year.

However, the thesis of this article is that written plans, properly prepared and flexibly used, are a useful tool to make the early childhood classroom function more smoothly and purposefully. For the role of the teacher has changed and is still changing. As parents, volunteers, students, paraprofessional assistants, cooks, nurses, researchers, and special consultants become a part of the classroom team, it is the teacher who has the final responsibility for utilizing these human resources in a way that will be of maximum benefit to children. Written plans can help achieve this goal. No matter how well formulated are the plans in the teacher's head, they are difficult for others to follow. And in all honesty, we as teachers must admit that the discipline of advance planning is likely to result in better planning.

In the following discussion, the teacher is referred to as the planner, since it is usually the teacher who pulls suggestions, needs, and insights into operational form. However, all members of the classroom team should be involved as much as feasible.

Form of Organization

Use any form of organization that works. Teachers and assistants may want to experiment with several types and will probably decide to use a combination. Plans may be organized:

*Around the primary responsibility of the adults---
Miss J. will be responsible for these things,
Mr. B. for those.

*Around areas or interest centers in the room.
- In the block area the transportation equipment will be out.
- In the art area, the children may make these choices.
- Outdoors, this equipment will be out initially.

*Around blocks of time.
- From 9:00 until approximately 10:30 these activities will be available.
- From 10:30 until 11:30 these activities will be available.

*Around the stated objectives of the school.
- Self-awareness (2 metal hand mirrors out near "dress-ups"---use with "I See You" song at snack time)
- Expressing feelings and ideas through art media (brush painting, red, yellow, and blue paint available)
- Developing language skills (with the interested children, place "Gumby" in various locations; have the children say where he is: "Under the book-shelf," "Behind Willie.")

Each of these has some advantages and

disadvantages. Organizing around objectives, for example, keeps one focused on goals, but gives little guidance on "who will do what, when shall we do it, and how shall we manage the day." A workable combination is to start with blocks of time. Within those, plan what activities will be emphasized in each area and what adult will probably be responsible for supervision and interaction. Usually those activities that are listed are in addition to, or a variation on, the activities and equipment that are "standard." Periodic review of objectives during planning will keep long range goals in mind; a brief listing on the plans of short range goals will show how these are being implemented.

Regardless of the type of organization used, several important elements must be considered as planning begins.

Considerations in Planning

Consider the needs of children, both individually and as a group. A group composed of children from impoverished rural background may have needs very different from an urban group of the same economic level. In turn, a group composed mainly of children from homes with plenty of money and "things" may have still different needs. A highly diverse group, either in age, cultural and economic background, or intellectual development will necessitate very careful planning if the needs and interests of each child are met.

Research and observation both afford overwhelming evidence of the differentiating effects of the various subcultures in which children are reared. No longer can teachers say "children are children," and provide identical experiences for each one. Planning should recognize these differences.

Groups containing many children with limited experiences and an even more limited vocabulary will need experiences to enlarge their world plus plans to help the children comprehend and express in words what they are experiencing.

Children who have not yet learned to listen to a story as a group should be given preliminary experiences to help them learn, but the three or four children who are ready for stories can be read to as they express an interest. If a teacher or paraprofessional cannot be freed to read to them, advance planning will have assured that their favorite stories are recorded on a cartridge or standard tape recorder, ready for listening.

The needs of individual children are also more likely to be met when planning is done. For instance, a volunteer who has received instructions and materials ahead of time can work on a one-to-one basis with four-year-old Bobby, whose language development is so retarded that his own mother can't understand him. The child who needs some special attention from an adult to help him "get started" should be considered as the teacher plans where adults will be assigned at the beginning of the day. The child who is having difficulty adjusting to school but who feels secure playing with pegboards and pegs, should be considered when the teacher plans what equipment should be out on a given day.

Consider the disposition of time each day and throughout the year. To provide for variation in children's interests, in attention span, in style and speed of activity, long stretches of time are needed.

Planning within long stretches of time each day makes discipline easier. The less the teacher has to interrupt the children's work to line up, move to another activity, or come together as a group, the fewer discipline problems will develop. The free choice of activities that the children are allowed when they first come might extend for an hour and a half or even longer. This doesn't mean that the same toys and art materials that were out at 9:00 are still there at 10:30, although they could be. They are changed, sometimes by the child, sometimes by the teacher, as the children lose interest or another interest is introduced.

A long stretch of time is needed for the achievement of long range objectives. If a child is to be allowed to work at his own pace, rather than at a pace dictated by the teacher or a time schedule, enough time must be allowed for him to do so. One cannot decide to be "through" developing a healthy self-image by Christmas, or "through" sorting and classifying by Easter. A program based upon the idea that children are interested in learning, and learn most when they are interested, must allow enough time for a balance of interests and activities over a longer period of time than a day or a week. This is analogous in some ways to Davis' classic study showing that children who had not built up prejudices about foods picked well-balanced diets when offered a variety of natural foods, but the balance was apparent only over a long period of time (Davis, 1939).

A child may spend "too much" time in the block area the first month, and only gradually move away to other areas. Over a period of a year, however, he might well have a fairly good balance of activities. Of course this places extra responsibility on the teacher for making sure that every activity available is a worthy component of the curriculum, which is determined by the program objectives.

Consider the available resources and the way these resources can be used to best advantage---the community, natural resources, books, songs, fingerplays, and both traditional and innovative equipment.

Resources are the learning materials for the child. The way they are used, how often they are used, or even whether they are used at all, has an impact upon the learning environment in a particular classroom. The teacher, then, must have in mind what learning she hopes is going to take place, and structure the environment in such a way that this is likely to happen.

Such planning makes possible the correlation of field trips, books, songs, and activities to make it easy for the child to make connections, see relationships, to discover the picture in a book, "just like we saw at the airport."

It allows for continuity and sequencing. A child does not discover and start to use certain material one day, only to find that it doesn't show up again for a month. Nor is he expected to maintain interest in activities that stay at the same level of difficulty week after week. Resources can be used in a variety of ways to maintain children's interest and provide challenge. If the same equipment, songs, games or stories keep showing up on the plan book again and again, the teacher can be sure that she needs to bring out some new equipment, suggest new uses for old, or change the books and songs. As the children master the simplest activity with outdoor equipment, for example, it should be changed around, combined or simplified, to provide more challenge and a different kind of experience.

Consider the areas of the indoor and outdoor learning environment and the activities that are likely to be occuring there. This involves placement of various activities so they are properly supervised, placement of adults so they can give proper supervision, and arrangement of equipment and activities so that one activity does not interfere with another.

With two teachers in the room, three or four activities requiring close supervision or teacher-child interaction would not be planned for the same time. A new piece of equipment which required careful supervision until the children learned how to use it safely, such as the wood working bench, would not be put out at the same time as fingerpainting and a ball rolling activity to help children say their own and each other's names. The ball-rolling, however, might be done later in the morning, when the wood working and fingerpainting have been put away, some of the children are having juice, and some need a new activity as an orderly transition of group time. Such commonsense planning makes it easier for the child to know and do what is expected of him, and easier for the teacher to handle the activities in a calm, relaxed manner. If, for example, there are new books on the shelves, and the children are likely to ask to be read to, then a record player set up close by would almost certainly interfere with the reading. The teacher could, however, read to interested children and by facing into the room, supervise another nearby activity such as pegs and pegboards, puzzles, or other relatively quiet manipulative toys.

Plans must be made for teachers, assistants, and volunteers to function at the position and in a way that will enable them to be most useful. For example, if a game requiring teacher-child interaction is planned, then plans must also be made for an adult who knows the procedure to be there.

Possible rough spots in the daily schedule can be anticipated and minimized with careful planning. Suppose the whole group is seated at the table for a birthday party and the next activity is a "story time" in a different part of the room. How are you going to get the children there with a minimum of confusion and without their losing interest in what comes next? This type of planning involves the flow of children and activities from one area to another, and the transition from one activity to another. The experienced teacher plans this automatically, knowing that new "dress-ups" will stimulate play and the table that was in that area yesterday had better be moved to provide more room, or that transition from juice to group time requires carefully chosen activities to prevent disorganization. Until a teacher has reached that point, planning helps.

Consider the objectives of the program, both long and short range. The achievement of objectives is directly related to how explicitly they have been defined and how carefully the learning experiences have been developed to achieve those objectives. Incidental or accidental learning is not enough. Whether the objective is a rather nebulous one such as "improving the child's self-image," or a very specific one such as learning the meaning of "the same as" and "different from," the objective is far more likely to be achieved if it is planned for, the necessary equipment and supplies are available, and the teacher and assistants know how to guide and respond to children.

The objectives of educational programs for young children are often couched in deliberately non-specific terms. But global objectives are more likely to be attained if at least some components can be operationally defined. Then planning toward those goals can proceed.

Consider the method or methods to be used. The teacher's philosophy about what young children should learn and how they learn is reflected in the way the program is planned. The way the needs of the children are met, the way the resources are used, the way available time is allocated, the way the components of the program go together and function in action constitute a method, or more likely, a combination of methods. Do children acquire and clarify their concepts by being told and shown, or by encountering "specific instances" of those concepts in their play, with acquisition and clarification coming through use and appropriate verbal interaction with adults and other children?

The teacher who believes that children want to learn and like to learn should have plans to reflect that conviction. The teacher who believes that children learn best with extrinsic rewards and punishments will let this guide her planning. The teacher who talks of individual differences yet who has all the children making identical pictures within the same span of time will probably manifest this inconsistency elsewhere also.

Planning can help implement one's philosophy of early childhood education. If that philosophy is unformed or a bit shaky, careful, thoughtful planning can help form and stabilize (but not solidify!) the philosophical foundations which uphold any educational structure.

At no other level of education does a teacher have so much freedom and so few constraints concerning content, method, and expected outcomes. Inherent in this freedom is both challenge and responsibility for careful, imaginitive, resourceful planning for the education of young children.

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IV. DEVELOPING CURRICULUM MATERIALS

The continued development, refinement, and evaluation of curricula for the pre-reading child are essential if the goals of Head Start are to be achieved. The proposed emphasis on year-round Head Start makes this development especially urgent.

Two types of learning situtations seem to be essential in an early childhood classroom utilizing teachers, teacher assistants, volunteers, and parents to help the children learn from a wide variety of activities.

1. Take advantage of learning opportunities that arise in spontaneous play.
2. Plan learning situations.

The New Nursery School has developed curriculum materials for both types of learning situations. Many of these are based on standard early childhood classroom activities, such as outdoor play, musical activities, group time, lunch and snack time, and manipulative toys. However, the materials show what children might be learning from the activities, and how adults can foster such learning.

Most of the preliminary papers included in this report are suitable to use either in a classroom or a home visitation program. "Opposites" and the revision "Picture Lotto Games" were written specifically for the home visitation. These curriculum materials are not designed to stand alone, but are complementary and supplementary to those submitted in previous reports and published elsewhere.

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LEARNING SITUATIONS AT SNACK AND LUNCH TIME
(This material is in preliminary draft form)

In an early childhood classroom food and the experiences connected with it should take on many of the characteristics of similar experiences in a good home, where adults and children prepare and eat the food together, with much verbal interaction to help children learn. Few schools, because of physical facilities, state and local laws, and sheer numbers of children, are able to provide such an ideal situation. However, many of the essential elements of the ideal can, with a little planning, be transferred to any classroom. Planning to make snack time and lunch time into learning experiences will allow teachers and children to relax and enjoy these portions of the day without feeling valuable "school" time is lost.

Explain your goals to the food preparation and service people, and enlist their aid. Most are very cooperative when they understand "why." Obtain the menus ahead of time and plan some learning activities utilizing them. The possibilities are endless. The suggestions and learning episodes given below are only a beginning.

*** Place pictures on a special food bulletin board. Magazines, the grocery store, and large food companies are possible sources of these pictures. Every item on the menu need not be illustrated; one or two are enough. Of course, the pictures must be changed every day to correspond to the lunch or breakfast menu.

Place the pictures close to the area where snacks are served, and if lunch is in the classroom, close to that area also. Especially if snack time is used to introduce and label luncheon foods, there is much opportunity for discussion, anticipation, and recollection.

If the children help prepare the area for lunch, this is an appropriate place to post the names of those children whose turn it is to help.

A bulletin board such as this not only stimulates interest in and knowledge of the food, it helps the child with several important learning skills.

A. It helps him learn to "read," interpret, and to draw inferences from pictures. Sometimes children who have not had many home experiences with books and magazines have difficulty with this skill, which is not innate, but learned.

B. It helps him learn that there are ways to find on his own information he wants and needs to know, much as we know to look up a word in a dictionary. When a child asks *Whats for lunch?* the teacher can tell him. *Mark, go see if you can figure out what we are having for lunch.* Of course, he will need some help until he learns to recognize and label the pictures, but the process of "seeking" will have begun.

C. Categories can be emphasized. For a week or so picture the vegetables, or fruits, or meats that are going to be served, and talk about both the category and the specifics within that category. *Yes, Mark, those pictures show what vegetables we are having for lunch - peas and carrots.* A similiar emphasis at snack time will help, and oranges, carrots, or apples for a group of children cost no more than juice.

D. It can serve as a stimulus for the abstract use of language to predict and remember. Children who eat lunch as the beginning of an afternoon session have an excellent opportunity at snack time to recall, as they look at a picture of the tacos served for lunch, *What else did we have? Think a minute and see if you can remember.*

E. For older children, a menu printed in large letters, or the name of the food printed below the picture is certainly appropriate. Although no emphasis is placed on learning to read the words, the child can learn that those marks do have an agreed upon meaning. Many children will learn to recognize the names of foods consistently on the menu, much as they recognize their own names, "Mountain Dew," "Pepsi" or the current highly advertised breakfast cereal. Some classrooms have a chalkboard on which they print the food available for "seconds." Children learn the significance of this, and often demand that the teacher "decode" those words which have such important meaning for them.

*** Some children have no labels or incorrect labels for many foods and eating utensils. The child who calls all beverages "pop" probably has nutritional deficiences, and almost certainly has intellectual deficiencies. His lack of accurate labels for familiar items will be a handicap to him. Table conversation consisting primarily of "more," "more dat," or "more thees" should be gradually upgraded so the child can say, *I want more mashed potatoes.* All food and eating utensils should be labeled as the children place them and also during table conversation. *Use your knife to spread the butter on the bread* (demonstrate). *Try the spoon for eating the applesauce instead of your fork, George.*

*** Food experiences can help children establish, maintain, and extend some of the language and concepts suitable for emphasis in an early childhood classroom. Many basic concepts are exemplified in common foods. Color, size, texture, and shape are among these. Much informal labeling and use of descriptive terms takes place at lunch or snack time. Planning to take advantage of this to help children learn specific concepts and the words which express them will probably result in better learning. Certainly it will insure greater interest on the part of both teacher and child.

A. Talk about colors.

B. Count when appropriate.
"How many prunes do you want, one or two?"
"Let's see how many crackers you have. One, two..."

C. Use negative affixes whenever appropriate.
"Do you want your bread buttered or unbuttered?"
"Do you want your roll with or without butter on it?"
"Do you want your lettuce with dressing on it, or without dressing on it.?"
"Unfold your napkin and put it across your lap."

Give precise directions involving location.
"Jessie, there is a place for you beside Alec."
"Jessie, there is a place for you between Alec and Kathy."
"Jessie, here is a place at the end of the table."

Try to incorporate some of the verbs the children do not know. Say "Pour out the milk you did not drink." (Many of the children do not know "pour.") "Spread the butter."

*** The child can be helped to learn and given practice in using certain intellectual processes, such as categorizing, making associations, seeing the relationships between an object and its pictorial or symbolic representation.

Categorize vegetables, fruit, meat, beverages or drinks. *What fruit do you want, peaches or applesauce? Today we have three vegetables - potatoes, carrots, and celery.* Then when the children have had a chance to learn the category and the labels for the various foods, change the question to *What vegetables are we having today?* and *What are the names of some other vegetables?*

Help the children learn that there are varying forms of the same food -- apples, applesauce, apple juice, apple pie; French fried potatoes (call them that) boiled potatoes, mashed potatoes.

Have available and send a child after a representation of the food, either a picture or in a puzzle.

LEARNING EPISODES BASED ON FOOD

Learning Episode: "Labeling and Counting Raisins"

Children are frequently reluctant to try unfamiliar mixtures of foods. One way to overcome this reluctance is to introduce the unfamiliar ingredient or ingredients ahead of time, so that the children can taste them separately and learn their names.

Objective:

At the end of the learning episode the child should be able to recognize and label raisins. He should also, with varying degrees of accuracy, be able to say and count out how many raisins he wants.

Equipment:

A box of raisins, to be purchased at the store.

Procedure:

Suppose apple and raisin salad is going to be served for lunch, and you want to be sure the children recognize those black "things" as raisins. Plan a trip to the neighborhood grocery store to buy a box of raisins for snack time. Have pictures of a box of raisins and some loose raisins so the children will know what they are looking for.

As in all trips to the store, remind the children to keep their hands off the food. A light weight length of rope for the children to hold will keep them together and orderly, an essential if the "friendly storekeeper" is to remain that way.

Walk past some familiar items in the store to give the children practice in using negatives.

Is this a box of raisins?...No, this is not a box of raisins; this is an orange.

Is this a box of raisins?...No, this is not a box of raisins; this is a box of crackers.

Is this a box of raisins?...Yes, this is a box of raisins. (Compare with the picture if the children are in doubt.) *If we want to buy this box of raisins, what do we have to do next?*

Children and teacher can pay the cashier and carry their purchase back to school for snack time.

At snack time, ask each child, *How many raisins do you want?* If he answers with a number, you and he count them out. If he holds up his fingers, ask him, *How many is that?* Help him count his fingers if he cannot do it alone. If he seems to have no idea what is meant by "How many"--and some children may not--say, *I'll give you five* (or some other number less than ten) *raisins*. Encourage the child to count them with you. It is through experiences such as these that children learn what is meant by "how many" and "one" and "five."

Talk about the raisins, their color and texture, and compare them with the picture. *Today* (or tomorrow) *we are going to have raisin and apple salad for lunch.* If the children are not sure what apples are, have one there for examination. However, for purposes of establishing familiarity and labels, emphasis on several items at one time is likely to be less effective than focusing on one--in this case, raisins.

Give the children several opportunities to say "how many" raisins they want and count them out. If a child asks for "more," encourage him to say what it is he wants more of by asking *More What?* If he cannot reply, help him remember by asking a choice question. *Ronnie, do you want more raisins or more apple juice?* Point to each item as it is named to help establish meaning. If he still cannot reply, give him the raisins anyway. Withholding food because a child lacks the confidence or the ability to speak out is hardly the way to make him feel comfortable about either food or school.

Have on the book shelf and bring to the table An Apple Is Red, by Nancy Curry, Bowmar Publishing Co., Glendale, California, 1967. This book has full color illustrations of both grapes and raisins.

At lunch time, have the box of raisins at the table again, to help children remember what went on at snack time. Each can try to count how many raisins he has in his salad.

Joe found six raisins in his salad. How many raisins do you have, Willie?. . .Four? You have fewer than Joe.

# \# \#

Learning Episodes: "Oranges sliced into Circles and Semicircles"

Objective:

The objective of these learning episodes is to help the child recognize and label the shapes "circle" and "semicircle." He should be able to do this at the conclusion of many experiences such as those described below, using oranges, apples, bananas, carrots, cookies, cucumbers, and so forth plus other examples of the concepts.

One example is expanded to show the procedure. Suggestions for extending it to other concepts and as a base for more abstract use of language are given at the end.

Equipment:

Oranges
A small knife for cutting
Plenty of napkins and paper towels

Procedure:

This activity is most appropriate at snack time when a teacher and five or six children can leisurely slice the oranges into circles, talk about them, and eat them. If this cannot be arranged, oranges can be sliced for salad or dessert at lunch time.

If the children have had little experience with food being cut at the table, tell them the knife is very sharp, and that only the teacher uses it. If there is a habitually "out-of-bounds" youngster in the group seat him far enough away to prevent grabbing.

With the children, name the fruit and talk about its color. Let the children feel and smell one of the oranges. If they are uncertain of those words, show them what is meant by "feel" and "smell."

Now I'm going to cut the orange . . . What shape is this slice? (If the children are quite familiar with shapes, the question can be asked before the orange is cut. *What shape do you think the slice of orange will be?*) *Yes, that is a circle.*

Slice another circle, cut it in half, and label it a "semicircle." Ask each child, *Do you want a circle or a semicircle of orange?* Hold up an example of each shape as it is named; do this as long as a child is uncertain which name signifies which shape.

If he replies, *a circle*, expand the phrase into a sentence, *You want a slice of orange shaped like a circle.*

If he points, the response should be determined by the teacher's estimate of that particular child's abilities at that time. If the child is quite shy, with a poor linguistic background, you might just hand him what he has pointed to, saying, *That slice of orange is a semicircle.* If he probably knows the labels and just needs to be reminded that talking is usually easier for others to comprehend than pointing, say *Tell me what shape you want*, or *At what shape are you pointing?* Do not, however, make getting the orange slice contingent upon a verbal response. Make it easy and desirable for the child to talk; build understanding and meaning for the things you want him to say (orange, circle, semicircle); give him a model for the way words go together to make a sentence; encourage but don't force.

Some of the children will probably eat the meat from the orange slice and notice that the peel is still a circle. Others may put two semicircles together to make a circle, or stretch the strip of peel out flat on the table. Encourage all discoveries of this type, as they are essential mathematical understandings. However, don't expect the children to make them the first day. Slice oranges once, then carrots, apples, and bananas. Have other experiences with circles and semicircles (see The New Nursery School, Learning Activities Booklet III). Then plan more experience with slicing food.

Send the children from the table to find other examples of circles and semicircles, and leave them at the table so the child who may be unable to express what he sees can hold a circle of orange peel up to the circle from a puzzle. His excited "Lookit!" can be interpreted by the teacher or another child.

If a child with a slice of orange shaped like a semicircle straightens out the peel, he is likely to notice that the sections are "Triangles!" If he does not, draw his attention to their shape, or have some examples of triangles at the table to help him "see." (Of course, the section is not a true triangle because of the one curved side.)

Extensions:

Many variations at this and other similar learning episodes are possible. The suggestions below are only a beginning. They show how one concept can be used to help learn another, how variety can be introduced to keep interest and motivation high, and how the concepts children have learned in quite concrete and down-to-earth experiences can be used abstractly.

*** *How many slices of carrot (banana) do you want, Mike?. . .All right, you help me count five slices as I cut.*

*** *Do you want a thick or a thin slice of banana, Janie?* Show the examples as you describe them.

*** *What shape do you think the slices of this cucumber will be?* After the children have guessed, slice the cucumber to let them verify or correct. (See the learning episodes on "Round" for more suggestions.)

*** A mature group can slice and bake different shaped rolls of refrigerator cookies - including one which will make a circle, of course. Let them predict what the shape will be from looking at the end of the roll.

*** *How many other things can you think of which are shaped like a circle?. . .A semicircle?*

*** *If you put the straight sides of those two semicircles together, what shape will you have? Tell me before you do it.*

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September, 1969

"ROUND"

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The shape "round" is a basic growth and design pattern in both natural and man-made objects. The ability to perceive and describe objects as "round" or "rounded" - to see and talk about roundness - is a needed skill at any time, but absolutely essential for success in school.

There are many examples of "round" in the child's environment. Thus it is relatively easy to develop a variety of activities to help children acquire and gradually refine this concept. For the same reason, it is easy to confuse the child unless those activities are carefully planned. The following guides will help with planning:

1. Examples - whether equipment, food, the child's body parts, or common classroom and household objects - should be selected to demonstrate the variety of things that are considered "round." They should not be restricted to balls (spheres) or circles. The greater the variety, the more complete and accurate will the child's concept be.
2. There is a tendency to confuse the terms "round" and "circle." While all circles are round, not all round things are circles. To avoid some of this confusion, introduce the two concepts at different times, then plan

activities to help the child begin to grasp the relationship.

3. "Square" is sometimes treated as the opposite of "round." There are a number of elements that signal "not round," among them angles, corners, straight lines, rectangles and triangles, as well as squares. Start with helping the child learn which things are round and which are not round, and that many objects have elements which are both round and not round, which have corners or angles.

4. There will be many opportunities for teachers to model language for children, through expanding the child's incomplete and inaccurate speech, and through semantic extension to other related ideas. Careful listening and an awareness of children's linguistic and conceptual difficulties will facilitate this process.

   If a child says "Him head round," the teacher's response might be, "Yes, *her* head is round. What other part of her body is round?"

   Suppose a child is asked to find something that "isn't round," and he picks up a ball, saying, "Dat round." He is demonstrating that he has the concept of "round" but lacks "not" or "n't." The teacher's response might be, "The ball *is* round. Let's find something that is *not* round. The square block *is not* round. the cube *isn't* round, Now you find something that *is not* round."

5. Experiences should be provided for individuals, small groups, and at group time. They should take advantage

of learning opportunities that arise in spontaneous play and routines.

"I see, George, you have used the block cylinders to make a round building."

"Put the round pan on the bottom shelf." (Round plastic wash basins make excellent storage containers)

"The caterpillar has spun a round cocoon."

"Why do you think that ball rolls so well? Try this square block to see if it will roll that far."

"Maria, do you want to use the round nesting cups or the hexagonal ones?"

In addition, learning situations to establish, clarify, and extend the child's concept of "round" should be planned. The learning episodes below are in the sequence in which they would probably be used. However, it should be remembered that these are examples only, and teachers will need to plan more. Also the episodes are not designed to be used in rapid succession. Each teacher must time the introduction of these and other activities to the abilities and interests of the children.

LEARNING EPISODES: "Foods That Are Round"

OBJECTIVE: The objective of these learning episodes is to help the child become aware of the many foods that are round, and to use the word in describing their shape. At the conclusion of them, the child should be able to name the shape when he is shown an example of food that is round.

EQUIPMENT: Any food that is round: oranges, apricots, apples, peaches, cantaloupe, some grapes, cherries, tomatoes, peas, cucumbers, small round beets, and potatoes, biscuits, and meat balls, are only a few examples.

PROCEDURE: Either lunch, snack time, or both can be used for these activities. Most effective is to eat the food and talk about its shape at snack time when a few children and the teacher can examine, feel, and talk about the food and its shape. When the food appears at lunch that day or the next, they can remember and talk about it again. Ideally, each child should be able to have a whole small fruit, or to see the larger ones whole, then cut to give him his portions. If this is impossible because of budget, school regulations or other factors beyond the control of the teacher, one example of the whole food can often be used in conjunction with foods that are allowed. When tomato, orange, apricot, or apple juice is scheduled for snack time, have a tomato or apple there to help the children learn from what the juice is made, and see that the vegetable or fruit is round. They may also notice that the juice glasses and the can or container it was in are round, too. Of course, peas, meat balls, biscuits, and so forth, are themselves examples.

If you think the children may know "round," hold up the example and ask "What shape is the orange?" If they do not know, - and many young children do not - tell them, "The orange is round," or "The shape of the orange is round." (Although many relationships, patterns, and combinations can be discovered, the language that "stands for" a concept or an idea cannot be. It must be learned from another person.)

Encourage the children to say "round" as soon as they are able. "What shape did we say the tomato is?" Respond to a child's realization that the peas and meatballs on his plate are "the same" by saying, "You're right, Bruno, the peas and meatballs are the same shape. What shape is that?"

Plan similar situations for several days far enough apart to keep them interesting, close enough together to facilitate remembering and making connections.

As the children begin to recognize that some objects are round and learn to use that word, use the situation set up by the food to help them recognize and label other objects as round.

"Yes, the peach is round. Willie, go look around the room to see if you can find something else that is round." Be sure that some round objects are available. If Willie remembers the shape of the juice can or the cucumber which had been labeled round, he may bring a cylinder from the block area. The next child sent may have a shaky concept of roundness and be led astray, bringing another block - a square, triangle, a rectangle. Say something like "Rosie brought another block, but it is not round. The peach is round and so is the cylinder, the ball, and the wheel from the puzzle. (Hold up each so Rosie can see them) Look again, Rosie, to find something that is round." If she doesn't find it this time, conclude that she does not have the idea and provide more experiences.

LEARNING EPISODE: "Sorting Objects That Are 'Round' and 'Not Round'"

OBJECTIVE: The objective of this learning episode is to help establish the child's concept of roundness by having him sort objects according to that attribute.

EQUIPMENT: A number of objects that can be sorted as to whether they are round or not round. Two or three new, intriguing objects will stimulate interest.

A pan or box to hold the objects.

PROCEDURE: Since this activity works best with one or two children, sit at a small table, or in a corner of the room. If interest is high, have some other toys close by for children who are waiting. Keep close control of the container so child and teacher can discuss each object.

When a child wants to play, say something like, "Joe, let's put the objects that are round on the table at this side of the box, and the ones that are not round on that side. Is the bowl round or not round?"

If possible, discuss each object with the child, using the terms "round" and "not round" and attempting to elicit them from the child. Be sensitive to the child in this, however. If he feels threatened, he may discontinue the game. Also, be alert to the possibility that a child may perceive "roundness" that the teacher has overlooked. Included in one such grouping were some interlocking plastic building blocks, rectangular in shape. Alfred confidently picked one up and placed it in the "round" class. When asked why, he pointed to the raised circles which hold the blocks together, and said, "Those are round."

An activity such as this gives an opportunity to observe the different ways children approach the task of classifying. Some seem to focus on one characteristic and pick out all the examples of that, as a child might consider an assortment of objects and pick out all those that are round. Others pick up objects at random, weigh the possibilities of "round" or "not round," and then place the object in the appropriate group. Others, unfortunately, do not seem to comprehend sorting, and will need many experiences with classifying on this and other more tangible characteristics (color, size) to help them learn.

LEARNING EPISODE: "A Kiss Is Round"

OBJECTIVE: The objective of this episode is to have children perceive and label roundness in common objects and in pictures of common objects.

EQUIPMENT: A Kiss Is Round, Budney, Blossom. New York: Lothrop, 1954, or another similar book. The title of this particular book presents the type of far-fetched, adult-type comparison that one usually tries to avoid in books for children. However, the majority of "round" things pictured are everyday objects, and there are enough of them that the unfamiliar and unsuitable ones can simply be omitted.

PROCEDURE: Group time seems most appropriate for introducing the book. Use songs and music to pull the group together, then read the book. Omit the items mentioned above and others as necessary to hold the children's interest. Pointing to the picture of each object as it is mentioned will help the child focus on the correct one. Outlining the round portion with a hand gesture will help emphasize the roundness.

After the book is read, ask the children, "What other things are round?" If the introduction of the book has been appropriately timed, the children will be able to perceive and name many round things in their immediate environment. They should also be able to remember and name round things which are not present, a much more difficult task. If the ensuing discussion is kept quite relaxed, with children free to respond as ideas occur, the response is likely to be better than in a rigidly controlled discussion. (For tips on handling, see Learning Activities Booklet V, page 9, The New Nursery School.)

A tape recorder running or an assistant taking notes can record some of the children's perceptive replies. The teacher should echo and extend as many of these as possible.

"Your head is round"

"And your eye"

"The...the...that thing!" pointing to the doorknob. And the teacher fills in, "Yes, the doorknob is round."

"Pop cans"

"And beer cans!"

"Oranges, 'n apples, 'n grapefruit."

"Shoe, shoe, shoe," and a child points to the eyelets in his oxfords.

"Your neck!" and circles his neck with his hands to demonstrate.

Close the discussion before the children lose interest, and put the book out for them to look at and discuss at a later time. If possible, go for a a walk and look for things that are round - telephone poles, wheels, steering wheels, lights on cars and trucks, and the sun.

Plan some follow-up activities to help children discover other round things. Blow bubbles, examine some bird's nests, provide dough or clay to make something "round."

LEARNING EPISODES: "Circles From Round Objects"

PURPOSE: The purpose of these episodes is to help the child to a beginning grasp of the relationship between "round" and "circle." At the end of them he should be able to look at a whole object of a simple shape - sphere, cone, cube, rectangular, solid, cylinder - and predict the shape that a cross-section of it will be.

EQUIPMENT: A variety of foods which when sliced crossways, either will or will not be the shape of a circle. Examples of those that will are oranges, carrots, apples, a cylindrical loaf of bread (frequently available from bakeries), and bananas.

Examples of those that will not are a square loaf of bread, cake, or cheese loaf.

PROCEDURE: Plan these activities for a time when the children already have a firm idea of "round" and "circle." As with other learning situations, only the teacher can judge when these should be started, what the spacing between them should be, and how many should be planned.

If snack or lunch time has been used to help the children learn other concepts - "Do you want a circle or a semi-circle of orange?" or "How many slices of carrot do you want?" (see Learning Situations at Lunch and Snack Time) - they will probably be ready to predict, "What shape will I get if I cut this orange crosswise like this?" Let them make their guesses, then verify or correct after the slicing.

Intersperse foods that do not slice to make a circle with those that do, so the children have to attend to the shape. Otherwise, they may simply recognize the activity and know that "circle" is the expected response. If the children ask what happens if you cut the orange, carrot, or whatever "another way," try it and see. Or the teacher may want to introduce it - "Would we have a circle if I cut this round carrot from the top to the bottom? What do you think, Ruthie?" Let the children make their responses, then cut the carrot to find out.

The child should not stop with learning to identify and label objects as "round." Activities such as the ones suggested in this last section require children to use the knowledge they have acquired abstractly to "think," combine, predict, then verify. It is not necessary to teach "definitions" or try to verbalize every relationship. It is enough if the children realize there is a relationship, and can express it in their own terms. They are acquiring a foundation for more explicit learning later.

For other suggestions on the relationship of "solids" to "planes" using the overhead projector, see Learning Activities Booklet V, p. 26, The New Nursery School, General Learning Corporation, 1969.

OPPOSITES

Pairs of words such as fast and slow, hot and cold, up and down, stop and start, on and off, wet and dry, are usually referred to as opposites. This idea is not as complex as the one that something is fast or slow, loud or soft, only as it is compared with something else. However, it is widely used, and children are expected to know it in school. Even more important, these words, whether used as opposites, or just as words describing or locating something, are essential for talking and thinking in the English language.

The examples given below should help a child grasp the idea of opposites. Remember that many demonstrations and experiences must be repeated in different contexts over a long period of time if the child is to grasp the idea.

For younger children, or those without the experiences and language to have grasped the concept of opposites, learning experiences should involve objects which the child can touch or manipulate, experiences in which he can be physically involved. For older children or those who are beginning to "catch on," symbolic work with books or pictures is appropriate. If commercial sets, such as those produced by Instructo, are used, remove illustrations which are ambiguous, hard to understand, or which are clearly not opposites, such as sun and moon, red and green. Whenever possible, these symbolic activities should be reinforced by others available in the child's immediate surroundings.

Some suggested activities for helping the child learn the meaning of a pair of opposites, and the meaning of "opposite" are given below. On all these remember that the child should say the words as well as have the experiences. Questions should be phrased and conversation planned to achieve this objective. "Do you want your name written at the top of the paper or the bottom of the paper?" "Is the light off or on?" Word or phrase replies should be expanded to sentences. "The light is on."

ON--OFF

The words "on" and "off" both have a wide variety of usages. In some of these usages, they denote opposing or contrasting conditions or locations; in others, they do not. Only on and off as "opposites" will be discussed here.

In common usage, these contrasts fall into two general categories.

1. On and off, meaning to connect or disconnect, open or close a valve or switch, or to be connected or disconnected, open or closed.

One turns electrical switches, such as a light, a car's ignition switch, or a television set on or off. Water is turned on or off at a faucet. A heating element or burner on a range is on or off.

2. On and off, meaning to put or place an object in contact with or covering another, or to remove the object.

Clothing is put on and taken off. One places an object on a table or shelf and takes it off.

For children with minimal language, experiences might be planned requiring the use of only one of these meanings at a time. For children who are beginning to comprehend and use all these meanings, a learning situation leading to the recognition that these words have a variety of meanings might be more appropriate.

Suggestions are given separately for each usage.

A.

"On"--"Off" In this meaning, on and off are usually used in two ways.

1. Signifying an action, such as "Switch the light on," "He turned off the water."
2. Signifying a condition, such as "The heat is on," "The light was off."

Activities

1. In classroom or home, look for opportunities to use or have the child use these words. (If in a home, be sure to tell the mother you are going to do these activiites.)

   "It is dark in here. What could we do to make it lighter?" If the child simply switches on a light or gestures, encourage him to say what he is indicating. (Of course, other answers should also be accepted, such as raising the shade or pulling back the curtain. "What else could you do?") "We could turn on the light". . . "Now turn the light off again. What did you do?"

2. A dry cell and socket replacement (available at most hardware stores) with a small bulb in it offers a vivid demonstration of on and off, as well as a chance to discover some electrical principles.

   Strip an inch of insulation from the end of each of the wires leading to the socket. Attach one of these to one pole of the dry cell. Present it to the child in this way and say, "The light is off; see if you can make it come on." Let the child work with the appartus to see if he can discover how to attach the second wire to make the light come on. When he does, ask, "What happened to the light?" "Now see if you can make the light go off. . . It is off." (Accept "went out" if the child says that.)

3. Have the child turn a water faucet on and off and talk about what he is doing, using the procedures described above.

Books and Pictures

1. Instructo "Opposite" Concepts, Cards 22A & B

B.

"On"--"Off" Meaning placing an object on another or removing an object from another, as in "Put the book on the table," "Take the book off the table," or "Put the hat on your head; take your hat off."

Activities

1. This activity would be a good one to lead into others designed to help children comprehend and express "On" and "off." If he wants to, let the child leave the dress-ups on until the end of the visit.

   Some "dress-up" items and a mirror are needed. For girls, gloves, hats, necklace, and scarf are especially appropriate. For boys, hats, nectie or cowboy scarf or vest, and men's gloves are appropriate. Take several items so the children can have a selection. "Pick which hat you want to put on, Marie. . . Where is the hat now? . . . Yes, the hat is on your head." Repeat with all the items, Use a hand mirror to let the child admire himself and to add variety to the directions: "Now look in the mirror, Ralph, and tell me where the cowboy hat is." If the child wants to try on some other hats or gloves, tell him something like "Before you try on another pair of gloves, what do you have to do with the ones you have on?"

   Use Instructo "Opposite" Cards, 23A and B, which show a child with his outer clothing *on* and *off*; or cards 4A and B, which show a child with blankets *on* and *off*.

2. A puppet can be used to give directions. "Put your hand on your head . . . What did you do?" "Take your hand off your head. . . What did you do?" "Put your thumb on your nose. . . What did you do?" Etc.

3. A new toy, such as a small flat bed truck, a plastic bendable figure, or a horse and rider, can be used in several ways. Children can place the objects *on* furniture or themselves, then take the objects *off*. The rider can get *on* and *off* the horse, and small objects can be put *on* the truck and taken *off*.

4. "Hand-piling" gives both teacher and child a chance to give directions. This can involve several children and a mother. Tell children and adults not to do anything until they are told. The teacher says, "I'll put my hand on the table (floor, chair). Mike, put your hand on mine. Mrs. Gonzales, put your hand on Mike's." Continue for everyone's hands, then give directions for taking the hands off. As soon as everyone catches on, encourage the child or mother to give the directions. If the child forgets, and leaves out "on" or "off," echo his direction so that those words are included.

5. Any stacking toys can be used to clarify the ideas of *on* and *off*. Practice can often be provided as other concepts are being worked on. "Put the red cube *on* the blue cube. . . Where did you put the red cube?"

Books and Pictures

1. Instructo "Opposite" pictures of a bird sitting *on* a branch, and the bird *off* the branch and *on* the ground.

2. *Language Lotto* (Appleton Century Crafts). "Prepositions." Change some of the wording so that the tambourine *on* the chair can be contrasted with the tambourine *off* the chair.

UP--DOWN

1. Songs & Fingerplays

   A. "The Eeency-Beency Spider"
   B. "My Arms Go Up, My Arms Come Down"---see T. Unit
   C. "The people on the bus go up and down," from the song "The Wheels on the Bus. . . "

2. Books & Pictures

   A. Blair, Mary. THE UP AND DOWN BOOK. New York: Golden Press, Inc., 1964
   B. Weber, Irma E. UP ABOVE AND DOWN BELOW. New York: Wm. R. Scott, Inc., 1943
   C. Instructo #33 Opposite Concepts
   1 A & B; 12A & B
   D. Construct stairsteps and a figure to place on a flannel board. Let the child walk the figure up the steps and down the steps. Let the child reenact with real stairs if there are some in his home or in the school.
   E. "Jack & Jill" nursery rhyme. Illustrate this with cutouts for a flannel board. Let the child walk Jack and Jill up the hill, then have them fall down the hill.

TOP---BOTTOM

Two ideas are presented:

1. Top and bottom such as might be located on a sheet of paper, a book, or a puzzle lying flat in front of a child.

2. Top and bottom such as might be located in a stack of blocks, books, or nesting cups, a glass, or any object where there is a vertical dimension to be considered.

Comprehension of the ideas of top and bottom is further complicated by the fact that with many objects, top and bottom are determined only by position. Cuisenaire rods, blocks, stacked toys, a blank sheet of paper, and a plate are in this category.

Other objects, however, have a definite top even when the "top" is positioned so that it is on the bottom. Pictures, a page on a book, milk cartons, and drinking glasses are examples of these objects.

Varying meanings of "top" and "bottom" certainly don't need to be explained to young children. Children can learn to understand and use the terms properly long before they can examine the subtle differences in common usage.

However, teachers should be aware of them as they plan activities to help children learn the meaning of these words. Such awareness will help avoid misleading activities, such as using the children's juice glasses to show that "top" is determined by position. In this case, the glass has a definite top and bottom, whether it is right side up or up side down.

Most of the activities suggested are best incorporated with others, as there is hardly enough content to sustain interest for a lengthy session on "top" and "bottom." Also, using the terms in a wide variety of situations over a long period of time is more likely to result in a flexible, usable concept.

1. Art work:

    a. "I'll write your name at the top of the paper." Later, ask "Do you want your name written at the top of the paper or the bottom of the paper?" pointing to "top" and "bottom" as they are said. If the child just points, say, "Is that the top or the bottom of the paper?" trying to elicit a verbal response.

2. Toys or games:

    a. Nesting cup towers. "Point to the cup that is on top. Now point to the cup that is on the bottom." (To build comprehension) "Where is the yellow cup?" (To encourage expression) "Yes, the yellow cup is on the bottom of the tower." If the child just points, say, "Tell me where the yellow cup is."

b. Use alphabet blocks, cubes, stacking men, or any other toy that will stack.

c. "Boob-tube." Available in variety stores is a game involving a plastic tube divided into sections. The object of the game is to shake marbles from the top to the bottom, then turn the tube and start over. Such a toy is ideal for teaching that "top" and "bottom" are determined by position. Say "Make the marbles go from the top to the bottom," pointing to both top and bottom. ... "Now turn the tube over and make the marbles go from the *top* to the *bottom* again." To get the children saying the words, ask, "Where are the marbles now?" To get the child *predicting*, hold the tube still with the marbles at the top and ask "What will happen to the marbles when you shake the tube?" If the child says "They'll fall down" or some other correct statement which doesn't use the desired terms, accept it. Then phrase a question such as "Yes, the marbles will fall down. *Where* will they fall?," to help him use "top" and "bottom."

d. Plastic tubes of colored water. The Elementary Science Study suggests filling rigid plastic tubes partly full of colored water. Cork and tape the ends. The children turn the tubes end to end, hold them flat, and shake them to watch the action of the bubbles and water. As they are turning them end to end, there is a definite top and bottom, determined only by position. They can watch the bubble go "up to the top." Two or three marbles in one of the tubes fall "down to the bottom.".

Tubes are available from plastics supply house. Get some of varying diameters.

3. Books and Pictures:

a. Instructo "Opposite Concepts."

Cards 1A and 1B, 21A and 21B.

1A and 1B - "*Where* is the boy?"

21A and 21B - "Which drawer is open, the one at the top, in the middle, or at the bottom?"

8

BOOKS, STORIES, AND FINGERPLAYS

1. Balian, Lorna. HUMBUG WITCH. New York: Abingdon Press, 1965

2. Scarry, Richard. BEST WORD BOOK EVER. New York: Golden Press, Inc., 1963 Shows baby bear getting dressed.

3. Lenski, Lois. COWBOY SMALL. New York: Lathrop, Lee, and Shepard Co. Inc., 1961 Have Cowboy Small get on and off the horse.

4. Any flannel board story. Have the children put the cutouts on the flannel board at the appropriate time and take them off.

5. Five little monkeys jumping on the bed.
One fell off and broke his head.
We called for the doctor and the doctor said,
"No more monkeys jumping on the bed!"
Four little monkeys. . . (continue until all of the monkeys have fallen)

Oralie McAfee
New Nursery School
Colorado State College
September, 1969

THE CONJUNCTIONS "AND" AND "OR"

Certain grammatical and conceptual elements that should be stressed in a Head Start program have many examples and are relatively easy to include in classroom activities. Color, shape, size, comparison and contrast are among these. Others, equally important, are far more difficult to incorporate. The conjunctions "and" and "or" and the affirmative and negative forms of the verb "to be" are examples in this latter category.

Children from language rich homes acquire meanings for these words from hearing and using them thousands of times over a period of several years. It is difficult to compensate for the lack of this, and doubtful if routine classroom conversation is adequate.

One reason that classroom conversation is insufficient is that the conjunction "and" is used to denote other than simple coordination. For example, one frequently says, *It's time to go outside and play*, or, *It's time to get in the bus and go home*. Such thoughts are probably more accurately expressed ... *go outside to play*, ... *get in the bus to go home*. Because of this variety of usage, activities to show the contrast between "and" and "or" must be thoughtfully planned. Any use of "and" will not suffice.

To help eliminate uses of "and" that don't illustrate simple coordination, try interchanging the linked words to see if the meaning changes. Take the sentence, *It's time to get on the bus and go home*. Changing to, *It's time to go home and get on the bus*, definitely changes the meaning, so one can surmise that in this sentence "and" is used to mean "to", "in order to," or "then."

"Or" has not acquired such a variety of usages, so that most of the time it is used, the contrast between "and" and "or" is illustrated. One common exception--*I must leave or I will be late.*

For helping children grasp this contrast, select for emphasis those uses of "and" and "or" which definitely show that "and" means "both," "or" means "just one."

As learning situations are planned, remember that the child is more likely to focus on the content words than the conjunction. If he hears two **words** such as "crayon," "pencil" he is more likely to attend to those than to the word connecting them, which may be either "and" or "or." Because of this, he needs more practice listening for "or," the word which indicates a choice.

# # # # #

Watch and plan for opportunities to use "and" and "or" in classroom routines.

"Do you want apple juice or grape juice, Ruth?"

"Today we are having apples and apple juice."

"Do you want a larger or a smaller sheet of paper?"

"Do you want a red sheet of paper or a yellow sheet of paper?"

"Which book shall we read now, COWBOY SMALL or HORSES?"

"Marcos and Anthony will help put away the blocks. Both of them will help."

"Are you going to build by the shelf or in front of the door?"

"Which truck do you want, the pick up or the fire truck? George would like to play with the one you don't want "

In addition to informal classroom emphasis, a planned situation such as the one below will help diagnose and remedy deficiencies in the child's understanding of "and" and "or".

Learning Episode: "And/Or"

Objective:

The objective of this learning episode is to have the child attend to and comprehend the meaning of the words "and" and "or."

Equipment:

A flat box or plastic container to hold a variety of small objects.

Classroom and household objects, and some toys. These should be selected according to the capabilities of the children. For example, if a child has no idea what is meant by red or blue, it does little good to tell him, *Hand me a red truck or a blue truck.*

Names of objects, functions of objects, attributes of objects, or numbers of objects can all be used in directions. Names or functions are usually easiest.

Select objects that can be identified in several ways. A green washcloth, a yellow washcloth, a red comb, and a marble might be used in the following progressively difficult directions.

> *"Hand me something you can wash your face with and something you can brush your teeth with."*
>
> *"Hand me a comb or a washcloth."*
>
> *"Point to a yellow washcloth or a green washcloth "*
>
> *"Pick out one comb and two washcloths."*
>
> *"Hand me something that is round or something that has corners."*

Have enough objects to make the game interesting, but not so many the child is confused or unable to find what he is looking for. Changing the objects and adding some interesting new ones periodically will keep interest high.

This same box of objects is suitable for directions using "is/is not" or for simply learning names, functions, or attributes of objects.

Procedure:

Sit at a table or in a corner of the room with the box of objects. When someone comes to find out what is in the box, say something like, *Look in the box and find (or hand me) a pencil and a crayon. ... You handed me a pencil and a crayon. Now hand me a toothbrush or a comb. ...* If he hands you both say, *You gave me a toothbrush and a comb. I wanted a toothbrush or a comb - just one of them.*

Continue as long as the child is interested. If several children are interested, they can take turns, but the game is most suitable for one or two children at a time. However, make sure the objects are returned to the box, and that there is no grabbing. *It's George's turn now. You will have a turn when he is finished.*

As soon as the children have caught on to the game, ask them, *What did you hand (give, show) me?* A correct reply to the direction involving "and" would have the child saying, *I gave you a pencil and a crayon.* However, the correct reply to the direction involving "or" would be *I gave you a crayon.* It would not help the child learn how to express and use correctly the word "or."

Make notes on the children's responses:

*** George - knows names and functions of objects, but always hands both of them, whether I say "and" or "or."

*** Rose - doesn't know names of several objects, but can select according to function, eg. couldn't get sponge and paper towel, but selected them when I said, *Wash the table with ... dry your hands with.* Responded to some "ors" but was so inconsistent I think it was accidental.

*** Willie - got everything right! Knows "and" and "or."
When he plays again, use "is - is/not," and more difficult attributes.

Such notes will give you a basis for deciding which children need more work with "and/or."

Language Lotto(TM)[1] has some cards which concentrate on conjunctions, which can be used for further experiences.

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[1] Gotkin, Lassar. Language Lotto, Appleton-Century-Crofts, Division of Meredith Publishing Company, New York, 1966.

Oralie McAfee
June, 1969

HOP SCOTCH

Variations on the game of "Hop Scotch" are innumerable. The few which are given as examples here can be expanded.

Materials needed-----A stick to draw in the dirt or chalk to draw on a sidewalk.

Procedure -----------Draw one of the patterns below in the dirt with a stick or on cement with chalk. Give the directions that are on the following pages.

The shapes do not have to be in any set order, but they should be close enough together that the child can jump from one to the other. They should be large enough that the child can get both feet inside the smaller one.

OBJECTIVES:The child is able to comprehend and express the following words:

1. Shape - circle, square, square, triangle, rectangle
2. Location - in, beside, between, where
3. Conjunction - and, or
4. Preposition - from, to

DRAW THESE SHAPES:

GIVE THESE DIRECTIONS:

1. "Nancy, go stand in the circle." (triangle, square, rectangle)
   "Now where are you standing?"

2. "Nancy, go stand beside the circle." (square, triangle, rectangle)
   "Now where are you standing?"

3. "Nancy, stand between the circle and the square." (triangle and square, triangle and rectangle, etc.)
   "Where are you standing?"

4. "Nancy, stand on a circle and a square.
   Where are you standing?"

5. "Nancy, stand in a circle or a square.
   Where are you standing? You're standing in the circle."

6. "Nancy, jump from the circle to the square. Where did you jump? You jumped from the circle to the square."

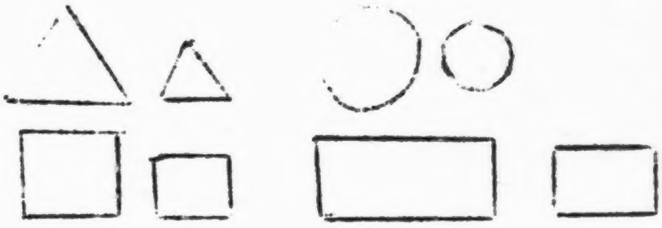
If the child answers with one word or a phrase, repeat his answer with a sentence.

If he stands in the wrong place, say what he is doing. "Nancy, you are standing in a square. This shape is a circle."

OBJECTIVES: The child is able to comprehend and express the following words.

1. Shape - circle, square, rectangle , triangle
2. Size - larger, smaller
3. Location - in, between, beside
4. Conjunction - and, or
5. Prepositions - from, to

DRAW THESE SHAPES:

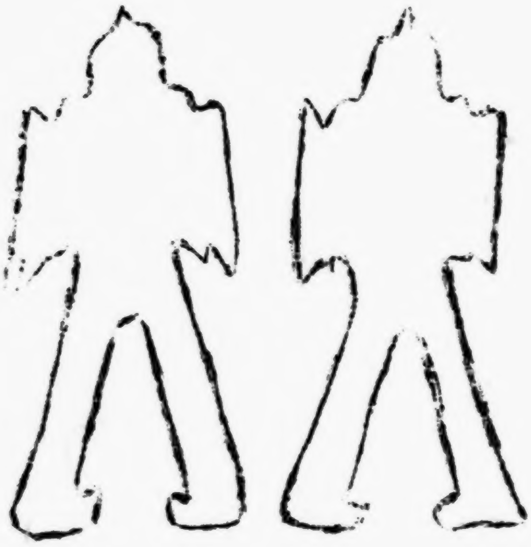


GIVE THESE DIRECTIONS:

1. "Nancy, stand in the larger circle. (square, triangle, rectangle) Where are you standing?"
2. "Nancy, stand in the smaller circle. (square, triangle, rectangle) Where are you standing?"
3. "Nancy, stand between the larger circle and the smaller circle. (square, triangle, rectangle) Where are you standing?"
4. "Nancy, jump from the larger circle to the smaller circle. (square, triangle, rectangle) Where did you jump?"
5. "Nancy, stand in the larger circle or the smaller circle. Where are you standing?"
6. "Nancy, stand in the larger circle and the smaller circle. Where are you standing?"
7. "Nancy, stand beside the smaller circle. Where are you standing?"

FIRST DRAFT
Oralie McAfee
March, 1969

STACKING MEN OR CLOWNS



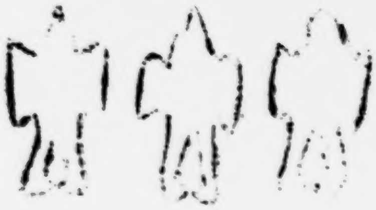
Description

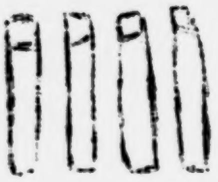
This equipment consists of wooden "men" or "clowns" shaped so they will stand, stack and balance in a number of ways. They are painted in a variety of colors so they may be sorted on the basis of color.

The balancing that can be done with this toy is quite complicated. Most children discover it by themselves. If they do not, the mother can demonstrate. A hard surface on which to build makes it easier for the child.

Play and Comments

1. A child lines up the stacking men either side by side or back to front.



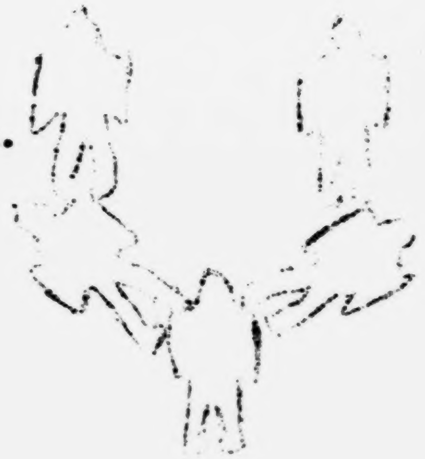


Comment: "You've lined up all the men side by side. Let's count to see how many you have. . . One, two. . . (mother points and counts with the child) or "You've made a whole row of stacking men."

2. A child stacks the wooden men vertically.

Comment: "Let's see how many men you've stacked. Let's start at the bottom (top). One, two. . ." (Point and count with the child.) Or, after he has learned to count, ask "How many men have you stacked?"

3. A child balances three or more of the stacking men.



Comment: "Look, you've made the men balance."

Later: "Let's see how many men are on this side. One, two. . . Now let's see how many men you've put on the other side. One, two . . . Why, it's the same number, isn't it?"

Or: "What would happen if you put one just on this side?"

4. A child groups the men on some basis--color, or as one child did, whether the men were smiling or not smiling.

Comment: "You've put all the men with green on them here, and all the men with red on them here."

Later: "Let's count the men with green on them."

Oralie McAfee
May, 1969

ALPHABET BLOCKS

Equipment ---- Alphabet blocks

Description -- These blocks are cubes with numerals and capital letters printed on them. On two sides the letters are raised.
Give the children some time to build with the blocks on their own. If they ask questions about the letters, answer them.

Objectives and Procedures are stated separately for each task.

-A-

Objective ---- 1. The child is able to stack the blocks to build a tower.
2. The child is able to count the blocks in a tower.

Procedure ---- 1. Dump the blocks in a pile on the floor or table. Say to the child, "Nancy, I'm going to stack one of these blocks on top of the other, and then another on top of that. You see if you can stack your blocks that way ... Now let's keep putting one on top of another to make a tower."

Continue building as long as the tower is steady.

2. "Let's count to see how many blocks you have in your tower." If the child can count by himself, let him. If he can't, point to and count the blocks in his tower, then in yours. Have the child point and count with you.

-B-

Objective ---- 1. The child is able to line up the blocks to make a row.
2. The child is able to count the blocks in the row.

Procedure ---- 1. Dump the blocks in a pile on the floor or table. Give the child half (approximately) of the blocks and you take half. Say to the child, "Nancy, I'm going to line up these blocks in a row. I'm going to take one block and put another one beside it, and another block beside it, and then another beside it. Now you do that with your blocks."

Continue until there are at least 8-10 blocks in the row. "Now you have a row of blocks and I have a row of blocks."

2. "Let's count to see how many blocks you have in your row." If the child can count by himself, let him. If he can't, point to and count the blocks in his row, then in yours. Have the child count and point with you.

-C-

Materials ---- 26 cards, with an upper case letter on each one. Alphabet blocks.

Objective ---- Given an upper case, or capital letter on a card, the child is able to find a block with that letter on it.

Procedure ---- Start with blocks and letters that are not easily confused, such as O V S T B or Z C E I P. At the beginning, avoid combinations such as M N V or O C D that are easily confused.

Make the child's task easier by giving him only 5-7 blocks to choose from.
Turn the blocks so the raised and colored letters are on top.
Hold up the letter cards one at a time and say to the child,
"Find the block with the letter C on it."
"This card has the letter C on it."

After the child finds the block with the correct letter on it, have him place it at the top of the letter card, and ask, "What letter is that?" If he cannot answer, say, "That letter is C," and go on to the next letter.

Continue as long as the child is interested, but stop before he completely loses interest.

When the child is able to find the letter that matches the letter on the card, try just saying the name of the letter, to see if he can find the letter on the blocks without looking at the card. If he can't do this, show him the card.

Oralie McAfee
June, 1969

PICTURE LOTTO GAMES[1]

Equipment: Picture lotto games, such as Wood Lotto (Creative Playthings), Language Lotto (Appleton Century Crafts), and Object Lotto (Appleton Century Crafts). These games consist of 4 to 8 playing boards, or master cards with several pictures on them and smaller individual picture cards to place over the pictures on the playing board. The teacher holds up a small card with a picture on it and names it; the player looks on his master card to find an identical picture, and then covers it with the smaller card.

Usually, the teacher can let the child select the master card he wants. Sometimes the pictures on the board represent some logical category, and children can make their choices on that basis: "Do you want the card with the picutes of clothing on it or the one with pictures of animals?"

If several children are playing, there should be no emphasis on one winning. In fact, to keep the children interested, select the small cards so that no child has to wait too long for a turn.

Objectives and procedures are stated separately for each game. The simplest (for most children) is given first. They gradually get harder.

A.

Objective: The child is able to match identical pictures.

Procedure: Hold up one of the smaller cards so the child can see the picture and say, "Look on your card to see if you have a picture of a tricycle just like this one." When he says, "I do," or "Me, me," or raises his hand, say, "Point to the picture of the tricycle." When he points to the correct picture, give him the card. If he points to an incorrect picture, hold the smaller card close to it and help the child decide that the pictures do not show the same object.

B.

Objective: After he has heard the teacher say the name of the object, the child is able to say the name.

Procedure: After the child has pointed to the picture of the object, say, "Tell me what it is," or "What is shown in that picture?" If the object pictured is in a familiar category, ask a question such as, "What is the name of that clothing (toy, food)?" or "What is that animal (Piece of furniture, vegetable)?"

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[1] Portions of this paper have been revised from Booklet III, THE NEW NURSERY SCHOOL, By Glen Nimnicht, Oralie McAfee, and John Meier, New York: General Learning Corporation, 1969.

Single word answers should be expanded into sentences. For example: "Plane. . . fly," could be expanded into "Yes, that is an airplane that flies through the air."

C.

Objective: The child is able to point to the pictured object from hearing a description of its characteristics or functions.

Procedure: If several children are playing, identifying the child who has the picture will make the game easier. "The object I am describing is on Mary's card." Do not show the child the picture on the smaller card. Instead, say, "I am describing a picture of something that flies. It has two rotors on it to make it fly, but no wings. . . The one in the picture is yellow and red. . . You can see a man sitting in it." Continue giving these kinds of clues until the child identifies the object or you think it is time to give him some help, either by naming the object or showing him the picture on the card. Encourage the child to name the object as well as point to it.

At all levels of this game, encourage discussion of the function of an object, its color, shape, size, and any other relevant information. "What can you do with a banana (pencil, glass)?" "What sound does a cow make?"

If a child does not know the names of many common objects, some effort should be made to give real experiences with those objects if possible. For example, if he mixes up pencisl and crayons, let him do some drawing and choose whether he wants a pencil or crayon to draw with. "Do you want to use a pencil or a crayon?"

If this is impossible, as it often is with pictures of animals, boats, trains, etc., book, puzzles, and other pictures will help the child learn to recognize these objects. In these specific instances, for example, THE ZOO (Pfloog, Jan. New York: Golden Press, 1964) or PLANES, TRAINS, CARS, AND BOATS (Kalish, Muriel and Lionel. New York: Golden Press, 1963) might be used.

In a home visiting program, the lotto game and the material to help the child learn about the objects can be taken on the next visit. In a school, many of the confusions and misconceptions which exist in children's minds can be dealt with immediately. "Gary, there is a book on the bookshelf which has some pictures of heliocopters in it. Please bring it here so we can look at them.

V. MOBILE INSTRUCTIONAL LIBRARY

Description:

Parents and youngsters continue to be enthusiastic about the learning experiences provided by the Mobile Instructional Library. This program was developed and implemented to enrich the educational environment in the homes of the New Nursery School pupils. It was hoped that by strengthening the child's home environment, his nursery school learning experiences would become more effective.

To determine the need for the Mobile Library, a survey was undertaken in January, 1969, to ascertain the nature of the pupils' home environments. To assess this environment it was decided to look for a number of tangibles such as the kinds of books, toys, Christmas gifts, and the library memberships held by the families.

The survey revealed that in fiftheen of the twenty-five homes there was no evidence of books. The other ten homes were not much better - one had adult books only, another one had a single atlas, and three had coloring books. Thus, really only five of the families provided their children with reasonably adequate reading materials.

FIGURE 1 - BOOKS

Number of families	15	No evidence of any books
	5	Inadequate reading materials 3 - picture books only 1 - atlas only 1 - adult books only
	5	Evidence of books
Total	25	

Only five of the twenty-five homes had toys of an educational nature. One home with eleven children was totally bereft of any toys. The other nineteen families had a wide variety of toys with a heavy representation of dolls, guns, cars, and trucks.

FIGURE 2 - TOYS

Number of families	1	No toys
	5	Educational toys (such as puzzles, games, playing cards, blocks, or balls)
	19	All other kinds of toys
Total	25	

Christmas gifts were another item included in the survey. Four families provided toys with specific educational value. The other twenty-one families purchased a wide variety of playthings as gifts.

FIGURE 3 - CHRISTMAS GIFTS

Number of families	1	Provided a chalk board
	2	Provided books - for one family it was a first time for books
	1	Provided coloring books
	21	All kinds of miscellaneous playthings as gifts (guns, dolls, trucks)
Total	25	

Library memberships were also included in the survey.

FIGURE 4 - LIBRARY MEMBERSHIPS

Number of families	5	Indicated they did have a library card
	20	Indicated they did not have a library card
Total	25	

The survey revealed a lack of educational support materials in the majority of the children's homes. The New Nursery School believes that when families of preschool children are adequately exposed to suitable educational materials, changes will occur within these families in toy buying patterns, parent-child relations, and eventually school achievement of the pupils. Therefore, the obvious lack of books and other educational materials reinforced the need to provide the services of the Mobile Instructional Library.

The Mobile Library, as envisioned, was to consist of carefully selected books, related reading materials, educational toys, and art materials such as crayons, pencils and paper. These materials were to be closely linked to the level of the accomplishment tasks of the New Nursery School pupils. These tasks and levels were established through the testing and learning process at the school, specifically, the Task Accomplishment Inventory (see section on Resume' of Testing and Data Collection). Home visitors were to visit weekly in the home of each pupil, teaching and playing with the child, to complement his level of performance at school. Also, they would demonstrate to the mother at home and involve her in the use of the library materials to be left for that week.

It was hoped that greater mother-child interaction, especially in the area of intellectual development would result from this program. Another immediate goal hoped for was that parents might see the learning possibilities in everyday things around the home. Furthermore, it was anticipated that increased home - school communication would develop. It was also hoped that the child's ability to do specific tasks, such as learning color names, counting, and others, would be increased.

Several other goals were also established. Parents were encouraged to see that they can play an integral part in the learning experiences of their children, as well as realize that they can enjoy talking and playing with them. Another objective was that parents recognize that children want to learn and can enjoy learning. It was hoped that as a result parents would share the responsibility with the school for their child's education.

Implementation:

Successful launching of the Mobile Library required that parents see its importance for their children and recognize their own responsibility in the program. This kind of agreement meant more than passive acceptance of the weekly visit into their homes by the "home visitor." It really implied a personal involvement with their children in the learning experience. Nearly half of the twenty-five families were represented at a meeting on January 13th, 1969, which discussed plans to initiate the mobile library. The parents voiced enthusiastic approval for the project. The staff of the New Nursery School was impressed with the high representation of fathers at the meeting. The parents were somewhat concerned about their participation in the program and the loss or damage which could possibly occur to the materials. However, these questions in no way deterred their enthusiasm for the library service.

With parental approval, immediate action was taken to select and organize the equipment and materials for the program. A selection of high interest nursery school books was ordered for the library. Several were bilingual (Spanish-English). Toys were purchased and in some instances designed, built, or made to meet the needs of the children in the Mobile Library program.

Not all toys are suitable to be used in a lending library situation. The following criteria were used to select equipment.

(1) Is it intrinsically interesting to a young child?

(2) Is it something that the child can play with by himself, as well as in interaction with an adult?

(3) Can it be used to help children learn some of the intellectual content and processes that are basic tools for learning--such as shape, color, size, sorting, and so forth?

(4) Are manipulative toys durable enough to stand up under the hard use given toys in homes with several

> children? If there are several pieces, are they large enough to minimize loss? Or, if a piece is lost, will it not ruin the value of the toy?

The recommended use of manipulative toys was to help children learn specific content or processes, but did not expect the impossible of parents who are often already over-burdened. ("Sit down and play with your child for twenty minutes. Try to give him your undivided attention.") Rather, toys have been chosen were appropriately timed comments will help the child grasp the significance of what he has done.

The items received most enthusiastically were books. The home visitor included at least one book to read to the child each visit, and at least one book to leave in the home until the next week. When possible, these books tie in with the planned emphasis. Purchased books have been supplemented by flannel board stories and books from the local libraries. Spanish speaking and reading parents and grandparents were pleased with the books written in Spanish.

Parents were encouraged to use either Spanish or English as the language for verbal interaction, whichever they felt most comfortable speaking. The home visitors spoke both languages.

All three of the program's home visitors are keenly interested in the philosophy and orientation of the mobile library. Two of the women are mothers of the school's pupils and came into the program because of the learning experiences their children were having. All three of the visitors bring unique gifts and a sincerity to their tasks. Not the least of these is their demonstration, day after day, that mothers can be effective teachers. Following the go-ahead January meeting, the home visitors entered into an intensive six week training period prior to making any home visits. Since starting the visiting program, they engage in a weekly in-service training and sharing session. These meetings are geared to help the home visitors maintain perspective and direction in their function and tasks.

From the very outset the visitors were helped to understand the significance and the importance of the essential teaching strategies. Their training emphasized assisting the child to develop healthy attitudes to ward learning. They were also helped to see that their visits are instrumental in the growth of an educational home environment which is essential to the success of a compensatory preschool experience. The visitors are asked to be aware of parental expectations and satisfactions (or dissatisfactions) regarding the New Nursery School and to communicate this information back to the school's teaching staff. Basically the visit is to result in far more than an enjoyable encounter for mothers, home visitors, and children. The visitor always keeps in mind that she is helping the mother to become more involved and responsible in the learning and teaching experience of her children.

Often the home visitor picks up clues to special needs which exist in some of the homes. Even though the New Nursery School does not really offer the kinds of services which may be needed, the families can be directed, and in some cases taken, to the appropriate community agency. Clothing. medical services, a driver's license, "Follow-Through" contacts, and translation services have been provided in this way.

The home visitors are also encouraged to spend some time in classroom observation and participation. There is a twofold reason for this requirement: first, it gives the visitors an opportunity to see the child function in a more formal group situation, and secondly, by having the home visitors present in the classroom the children associate the visitors directly with New Nursery School.

Supervision is also provided the home visitors to assist them with clerical responsibilities as well as coordination with the overall New

Nursery School orientation. Written materials, workshops, resource persons, and the school's teaching staff, provide the visitors with further working guidelines and suggestions.

To assist the home visitor to make her weekly call significant and relevant to the child's cumulative learning, consultation with the Nursery School teaching staff is encouraged. The home visitor also refers to her previous week's report to recall the level of the task she and the pupil engaged in during that visit. The completion of these reports is the responsibility of the home visitor. To facilitate preparation of this report, a form, the Mobile Library Check List (see attachment) is used by the visitor. This list simply helps her to make accurate and precise entries covering the visit.

Another entry on the check list indicates the exact length of each visit. This is an attempt to help the visitor be more aware of the way she is using her visiting time. If the regular visit is not kept, a note of this is also made on the form. This form was introduced because accurate reporting posed a problem during the first months of the Mobile Library.

Visitors plan to spend an hour with each child. The first few visits are short, then gradually lengthen. Visitors are sensitive to special conditions in the home, and do not remain if they sense a visit is not appropriate at that time. If there are two children in the family, the visitor can stay longer.

The question of how often to go back if a parent is not there at the appointed time is decided on an individual basis. In some cases the visitor tries to make another appointment the same week. In others, the planned visit waits until next week. Responsiveness and interest of parent, possible reasons for the absence and relationship between visitor and parent are some of these determining factors. This problem is complicated by the fact that fewer than half the families have telephones, so that prior checking to see if a parent is home is impossible.

An index card such as the one illustrated below has helped parents remember. Visitors suggested that parents put the cards near the sink or range in the kitchen.

RUTH BARNES

MRS. MARTINEZ WILL VISIT EVERY

THURSDAY AT 1:15 P.M.

This first year of operation for the Mobile Library has had its growth problems. Goals and objectives established in January have been revised and modified as necessary. Instruments which were designed and introduced into the program have been tested and in some instances refined. One problem, as already indicated, was maintaining complete and accurate records of the home visits. Because of this we are able to offer only approximate visiting records during the first several months. However, from May until September our records reflect a much higher degree of accuracy.

FIGURE 5 - HOME VISITS

	Mar. 1 to May 15 (approximately)	May 15 to Sept 30	TOTAL
Visits	150	172	322
Not home	20	20	40
Cancelled visits	15	15	30
Total	185	207	392

FIGURE 6 - BOOKS LEFT BY HOME VISITORS

	Mar. 1 to May 15 (approximately)	May 15 to Sept. 30	TOTAL
Books	125	150	275

FIGURE 7 - INSTRUCTIONAL MATERIALS (TOYS) LEFT BY HOME VISITORS

	Mar. 1 to May 15 (approximately)	May 15 to Sept. 30	TOTAL
Toys	180	229	409

All three of the above figures reflect the problem of accurate record keeping during the early stages of the Mobile Library's operation. With some modifications the home visitors are now much more accurate in their reporting procedures.

One of the trying situations home visitors have had to cope with is a seemingly inappropriate learning environment. Often younger siblings have demanded and dominated the visitors' time and attention. Visitors learned to take sufficient materials to involve all the interested children.

When the siblings were busy, the visitor would then work with the child she had intended to visit. Such situations not only help the child learn, they help the mother see in action effective strategies for coping with the demands of several children. At times the mother has appeared disinterested or preoccupied and failed to involve herself in the learning experience. However, mothers became more interested and involved as their understanding of the program increased. From time to time guests or relatives are also present in the home and treat the visitor's call as a novel experience. Even though this situation caused the home visitor to feel self conscious, it actually provides an excellent opportunity to involve the entire family. Visits made at night or when the father was home from his job because of bad weather (a frequent happening in Colorado weather), have proved especially rewarding to family and visitor alike.

Lost, misplaced, and damaged instructional materials posed another problem. Even though the parents were assured that these would be replaced, several felt they should withdraw from the program because of this recurring difficulty. To cope with this, a large, colored, cloth, draw-string bag was made for each child to store his materials in. Not only did this reduce loss and damage of materials but it created a sense of ownership and personal identity for the youngster, especially since the bag was marked with his name. Each child was given scissors, crayons, and a pencil to keep in his bag.

Flexibility in scheduling visits and assigning children with visitors has made it possible to provide variety and optimum service by the mobile library. A family which was not responding to one visitor could sometimes be switched to another who could achieve more positive results.

The summer brought with it a kind of "school's-out" attitude which also presented a problem for the visitors. Families were frequently out visiting, working, or just not home. However, only in one case did a parent directly request not to be visited. This is a foster home situation and it appears that the foster mother may have priorities other than the child's intellectual growth. Four of the remaining twenty-four families were engaged in migrant agricultural work which made it impossible to continue the home visits.

During the summer, a half day bilingual program was conducted to inform parents and children in the immediate neighborhood of the school about its services both for children and parents. Most of the children participating in this program entered either kindergarten or first grade this fall. Information gathered from this bilingual program will contribute to the development of the planned Spanish tutorial.

Home - School Contacts:

The New Nursery School has attempted to encourage both formal and casual parent-school contacts. As in any school, the nature of these contacts shows a good deal of variety. However, since January, 1969, approximately one third of them have dealt with the mobile library and in nearly every instance the contact was initiated by parents.

Parents were invited to visit their children during class time at school. Mothers not only observed but also functioned as teacher-helpers.

Since the lunch program was new, parents of the pupils were invited to join them for their noon meal at the school. Parents were able to see that the children were getting an adequate, nourishing lunch. Also, they were able to see and participate in the learning opportunities presented at eating time. Such an experience contributes directly to the goals of the mobile library--having parents see and take advantage of everyday learning situations. Parents usually come early and stay for lunch, or have lunch and spend part of the afternoon. These visits are still in progress.

Small group meetings were held in April for mothers to observe, ask questions, and explore possibilities for aiding their children's learning at home. Nine mothers attended these. At least twice that number made appointments to come, but did not.

The most successful parent--school function was purely social--a family picnic held during the summer. Fathers, mothers, grandparents, cousins, brothers, and sisters came for a "pot luck" picnic with the staff. Twenty-seven adults and forty children came. While the children played, parents and teachers had a chance to visit.

Even when home — school communication was not direct, informal communications greatly increased. Teachers noticed fewer unexplained absences and more knowledge of the home situation than in previous years, even though systematic efforts to be well-informed were made previously. Library staff have conveyed information about illness, need, changes in home, and feelings that probably would not have been known otherwise.

Unanticipated Benefits:

Some unanticipated benefits of the home visitation program have resulted or are planned. The Weld County Library provided a bi-weekly mobile library service to the Spanish Colony for the first time this summer. The New Nursery School Mobile Library was instrumental in getting this service for the Colony. Being discussed is possible use of the Spanish Colony Community Center, when completed, for a continuation of this service.

The mobile library staff will be used to encourage parents to tune to "Sesame Street," the Children's Television Workshop productions. Cooperative promotional efforts with Greeley Head Start are planned. Since Denver ETV will televise the show both morning and afternoon, each child will have an opportunity to see it. The specific educational goals of the Children's Television Workshop are very similar to those of the New Nursery School.

Plans are also underway for a meeting and demonstration to give parents specific help in selecting, buying, or making appropriate Christmas gifts.

Often the home visitor is regarded as a special friend. Especially is this true when the family is Spanish speaking. As a result, a warm, free, two-way relationship is established which is beneficial to all concerned.

Conclusion:

Much growth has taken place in lives of the children, families, and home visitors during this first year of the mobile library. All are becoming increasingly enthusiastic about the program and convinced of its positive effects.

These statements from the visitors' reports capture the essence of this healthy growing spirit:

A home visitor reporting on a visit said, *I had my suitcase full of toys and _______ was awfully curious. ... There isn't a thing this child can't do ... I could go on and on with this pupil ... his family have a great interest in the Mobile Library, I think this is just wonderful!"*

Another report reads as follows, *I worked with ________ for about one hour and finally left. I get so involved with this child that I forget all about the time.*

One of the visitors reported as follows, *Mrs. ________ was very glad that the school has a toy library and the home visits. This sure made me feel good that she felt this way.*

Another visitor states, *Mrs. __________ was very pleased to see me. She said __________ kept asking, 'when will my teacher get here?'*

A mother discussing both her surprise and satisfaction with the mobile library visits said, *Those people are really interested in my kids.*

Data to supplement these subjective evaluations are being tabulated and analyzed. They will be reported in the research analysis.

MOBILE LIBRARY CHECK LIST

Pupil's Name ______________________ Date ____________________

Home Visitor ______________________

CONCEPT EMPHASIZED	EQUIPMENT	BOOK/S
Counting	Counting Frame Number Sorter Matchmates Flannelboard - animals - shapes Marbles, cubes, rocks, etc. **Mirror** Counting Cubes	I Can Count Counting Carnival Brian Wildsmith's 1,2,3's Smiley Lion Book
Color	Color Lotto Nesting Cups Flannel Board Crayons, paper Counting Cubes	The Color Kittens My Slippers Are Red Magazines, catalogues, etc.
Shape	Flannel Board Parquetry Blocks "Hopscotch" Large Attribute Blocks Playdough Shape Card Game Playskool Colored Blocks	Brian Wildsmith's, 1,2,3's The Sign Book
Size a. big, little bigger, littler biggest, littlest large, small larger, smaller largest, smallest	Playdough Nesting Cups Flannel Board Orange, "same size" squares Marbles, Balls, etc. Paper	Animal Babies Papa Es Grande The Very Little Boy The Very Little Girl
Size b. long, short longer, shorter longest, shortest tall, short taller, shorter tallest, shortest	Playdough Chalkboard Alphabet Blocks Parquetry blocks Nesting Cups Alphabet Blocks Flannelboard Stacking Men Spools	Whistle For Willie
Letters	Alphabet Board Alphabet Blocks Flannel Board (with upper & lower case letters) Chalk Board	ABC Book The Best Word Book Ever Words
And/or; Is/Is Not	Kit of objects for games "Hopscotch"	

CONCEPT EMPHASIZED	EQUIPMENT
Opposites	"Opposite Concepts"-pictures Spools Parquetry Blocks Nesting Cups
Non-Specific Language Development	Flannel Board Stories Puppets Lotto Games Rhyming Pictures Ball Jump Rope Puzzles

CONCEPT EMPHASIZED	BOOK	
Animals	The Nest Book The Horse Book My Hopping Bunny Baby Farm Animals	Kittens Puppies Curious George
Family and Child	Papa Small Los Cuatro Sombreros de Benny Amigos! Amigos! Amigos! Cowboy Small	
Traditional	Mother Goose The Three Bears	
Words	Little Golden Picture Dictionary Cat In The Hat Beginner Dictionary (Spanish: English)	

LENGTH OF VISIT ______________________

Time visit started ______________________

Time visit ended ______________________

REASON, IF NOT VISITED

____

____

VI. DEMONSTRATION AND DISSEMINATION

The curriculum and procedures developed and written at the New Nursery School are currently being used nationwide in programs for young disadvantaged children. One of the models for Head Start and Follow Through is based upon the New Nursery School philosophy and curriculum. There are many requests locally, nationally, and internationally for observations, demonstration, and use of recently developed materials. The methods, curricula, and results of the New Nursery School Research Project are available to personnel in other programs for disadvantaged children.

The New Nursery School is equipped and staffed to function as a demonstration center. Observation booths designed for watching and listening to teachers and learners adjoin each classroom area and learning booth. Written observation guides, films, and trained personnel are available to explain the program. The brochure on the following page is given as a brief description of the school's program. The observation guides which follow are given to visitors planning to observe.

THE OBJECTIVES OF THE SCHOOL

In the affective domain:

- to develop a positive self-image.

In the cognitive domain:

- to increase sensory and perceptual acuity;
- to improve language skills;
- to promote the formation of certain concepts essential for later learning;
- to develop the child's ability to solve problems.

THE NEW NURSERY SCHOOL

School of Education
Colorado State College
Greeley, Colorado 80631

A program for 3, 4, and 5-year-old educationally disadvantaged children.

he ANIMALS o
ARMER JONES

Children often are helped to succeed in school because of the advantages of their home environment; they can also fail if there are too many disadvantages in that environment. All too many families are poor, have a low educational level, a culture quite different from that of the school, and lack the knowledge and means to encourage their children's learning.

Such families almost always pass educational handicaps on to their children — language that is inadequate and speech that is hard to understand, limited experiences, a lack of simple concepts, and little ability or desire to solve problems. Perhaps the most crippling heritage of all is lack of assurance and confidence in their own abilities.

The New Nursery School develops, implements, and tests ways of helping these young children overcome their educational handicaps. We try to increase a child's confidence in himself — that good feeling of "I'm all right. I can," — plus the competence to sustain that feeling. Intellectual development is emphasized in a learning environment which is also responsive to the young child's physical, emotional, and social needs. A wide variety of instructional materials, such as art, books, records, songs, telephones, tape recorders, non-automated "talking typewriters," blocks, self-correcting manipulative toys, games, food, outdoor activities, and field trips are used by the teachers to help the child learn.

We try to help each child become a more effective and efficient learner through developing the ways he learns. We hope that he will learn to use all of his senses as means of finding out about his surroundings; that he will learn to interpret accurately what these senses encounter, so that his perception of the world about him will be clearer. We want to encourage and prepare him to confront and solve problems independently, efficiently, and with satisfaction.

The New Nursery school also wants the child to develop and be able to use certain fundamental concepts and skills which seem to expedite learning:

- To label and describe.
- To make associations between objects and actions, and their representations or symbolic expressions.
- To comprehend and express accurately ideas of color, size, shape, number, relative and contrasting location and conditions.
- To classify, order, contrast, and compare.

Although the program is a dynamic, changing one, certain conditions which seem to encourage learning guide its development.

- There is an emphasis on exploration, experimentation, and discovery.
- There is an emphasis on the child's being actively, physically involved in the learning process.
- There is an emphasis on the child's choosing his own activities from those that are available, and setting his own pace and style in working at them. The classroom activities are flexible and varied, to meet the needs and interests of an individual child or a group of children.
- There is an emphasis on intrinsic motivation. The child participates in learning activities because he is interested and wants to learn, not because of external rewards or punishments.
- There is an emphasis on **learning,** rather than on **teaching** in the traditional sense.

Since the school was started in 1964, support of its programs for young children and the training of teachers of those children has come from the Boettcher Foundation of Denver, the Office of Economic Opportunity, the U.S. Office of Education, and Colorado State College.

— VISITORS ARE WELCOME —

For further information, write:

The New Nursery School, Colorado State College **1203 4th Street, Greeley, Colorado 80631**

Oralie McAfee
January, 1969

GENERAL OBSERVATION GUIDE

As you are watching, please observe the following about:

CHILDREN:

The children are given long stretches of uninterrupted time in which to play.

The children work at what they are interested, for as long as they are interested (within limitations imposed by time and other children's interests).

The children have much freedom, but freedom within definite limits. Those limits are set by safety, the rights of other children, and the objectives of the school.

ADULTS:

Adults are involved with the children, but do not dominate the situation.

Adults firmly guide the group and individual children, but in a way that allows each child to retain his self-respect.

Adults plan and set up learning situations, and also try to take advantage of those that arise in children's spontaneous play.

Adults encourage children to experiment and solve problems on their own.

Oralie McAfee
January, 1969

SPECIFIC OBSERVATION GUIDE

OBSERVATION BOOTH A

The Art Area

1. Describe what art activity is taking place, if any.

2. What specific learnings might be expected to result from this activity? What is the teacher doing to facilitate this learning?

3. Is this activity correlated in any way with other experiences going on in the room? (Circumstantial evidence, such as bulletin boards or books, is acceptable.)

4. During the period you observed, what was the longest time any child participated in an art activity?

   The shortest?

Oralie McAfee
January, 1969

OBSERVATION BOOTHS A OR B

Block and Block Accessory Area

1. List briefly what the children you observed in this area might be learning from the way they are using the blocks.

2. Which of these learnings might be, and probably should be, given verbal interpretation by the teacher?

Which of these learnings might be considered as "building for the future" and probably not verbalized, or made explicit?

Oralie McAfee
January, 1969

OBSERVATION BOOTH A OR B

1. List what small manipulative toys (pegs, cubes, puzzles, Cuisenaire rods, etc.) the children played with during the time you observed. Beside each one indicate what, if anything, the children might be learning from this play.

2. Describe briefly how the arrangement of the equipment, on shelf, table, or floor, might promote learning.

3. Describe briefly some verbal or non-verbal interaction between teacher-child or among the children that seems to have significance to the learning situation.

Oralie McAfee
January, 1969

OBSERVATION BOOTH A--Snack Time
10:15-10:30 (approximately)

1. How many children are served snacks at one time?

   List observed and other advantages of this method.

   List observed and other disadvantages of this method.

2. Snack or lunch time can become an integral part of the "curriculum." From your observations, what do you think the teacher had planned for the children to learn?

Oralie McAfee
January, 1969

OBSERVATION BOOTH B
Books and Stories

1. List the various ways books and stories are used during the time you observe. (e.g., Martin looked at a book briefly, then left.)

2. If someone is reading to the children, keep a running account of the number of children being read to. (For example, 3, 1, 4.)

3. Describe briefly the techniques used by the teacher to help the children learn the meaning of the printed words.

Oralie McAfee
January, 1969

OBSERVATION BOOTH B--Group Time
10:30-10:45 a.m.--(approximately)

1. Children are not required to participate in the group activity. How many come to the group? How many do not come to the group?

2. Describe provisions made for a smooth (hopefully) transition to and from the group time.

3. List some of the specific ideas or skills the teacher might be wanting the children to learn during the group time you observed.

4. In what ways are music, fingerplays, and action games used in the group time? (For example, to build toward a specific concept, management and control, etc.)

Oralie McAfee
January, 1969

OBSERVATION BOOTH C
The Typing Booths

Although few schools have, or plan to have, learning booths as a portion of their instructional program, many aspects of the learning booth procedures have implications for all classrooms.

1. What are some of the advantages that you can observe of a child's one-to-one relationship with an interested adult.

2. Record any evidence that even very young children have differing "styles" of approaching a problem.

3. Record any evidence that the children have a differing "pace" of learning.

4. List some of the observed activities and/or techniques which might have application in any school for pre-primary or primary children.

Oralie McAfee
January, 1969

OUTDOORS

1. For young children, the outdoor play time should be a portion of the total learning environment. List what evidence you observe that this is so.

2. What uses are made of "natural" resources--both outdoors and indoors. Animals, sunshine, water, sand, etc.?

Demonstration and dissemination has been effected through cooperative funding from local, state, regional and national sources.

Demonstrations and Visitations

One hundred sixty-three (163) teachers, students, administrators, and parents participated in Observation-Information Conferences sponsored by Colorado State College.

Classes from the sociology department at Colorado University participated in these as part of their "Junior Year in the Field."

Classes from Denver University and Colorado State College observed. Two hundred sixty-four (264) individuals visited and observed.

Mr. William Painter, in charge of Special Programs in Early Childhood Education, Sumter, South Carolina, observed and participated in the classroom as part of his training for that job.

Written Materials

One hundred forty-six (146) requests for descriptive brochures, samples of, or specific titles of curriculum materials developed at the New Nursery School have been filled by mail. These have gone to Korea, Israel, Canada, Puerto Rico, Hawaii and Alaska, as well as the continental United States.

Visitors have been given written materials as they indicate interest and need.

One hundred (100) samples of curriculum materials were distributed to early childhood educators at the National Association for Education of Young Children in New York, in November, 1968.

Ninety (90) samples of curriculum materials were distributed to early childhood educators in the Early Childhood Lecture Series at Eastern Michigan University.

Forty (40) descriptive brochures and relevant curriculum samples were distributed to participants in the Colorado State College Institute "A Multi-Media Approach to Library Services for the Spanish Surnamed."

A large sampling of curriculum materials was given to each principle participant in the Colorado University Institute for Compensatory Education.

Thirty-five (35) samples were given to teachers participating in an E.P.D.A. Program of the Weld County Board of Cooperative Educational Services.

Written descriptions are also available from ERIC and published works.

Publications in this year include:

Nimnicht, Glen; McAfee, Oralie; Meier, John. The New Nursery School, New York: General Learning Corporation, 1969.

McAfee, Oralie. "An Oral Language Program for Early Childhood." Classroom Practices in the Teaching of English. Champaign, Ill.: The National Council of Teachers of English. November, 1968.

Meier, John H. "Some Results of New Nursery School Language Research." Childhood Education. December, 1968.

Meier, John H.; Nimnicht, Glen; McAfee, Oralie. "An Autotelic Responsive Environment Nursery School for Deprived Children." Disadvantaged Child, Vol. II. edited by Jerome Hellmuth. Seattle: Special Child Publications, 1969.

Publications placed in this year include:

McAfee, Oralie. "Planning the Preschool Program." To be published in a collection by the National Association for the Education of Young Children, Fall, 1969.

Speeches and Workshops:

Mrs. Oralie McAfee gave the following speeches and demonstrations.

1. Two workshops on language development and concept formation in the Early Childhood Lecture Series, Eastern Michigan University, Ypsilanti, Michigan.
2. Speech to Rotary Club, Greeley, Colorado.
3. Participant in outlining revision of Kindergarten Guide, Colorado Department of Education.

4. Speeches to three community groups interested in the work of the school.

5. Speech and demonstration to the parent-controlled Follow-Through group in Greeley, Colorado.

6. Speech to Weld County Department of Public Welfare social workers, supervisors, and others concerned with young children.

7. Workshop leader-resource at National Conference, National Association for the Education of Young Children, New York. Conducted two sessions.

8. Speech to the Colorado Association for the Education of Young Children.

9. Speech and demonstration to the Regional Convention of Montessori Educators, Jarrow School, Boulder, Colorado.

10. Speech and explanation of Mobile Instructional Library to participants in Colorado State College Institute "A Multi-Media Approach to Library Services for the Spanish Surnamed."

11. Explanation and discussion of New Nursery School program with participants of Institute for Compensatory Education, Department of Psychology, Colorado University.

    This institute was under the direction of Dr. Eugene Gollin. Four participants and Dr. Gollin spent a day at the school as part of their information gathering on compensatory education. Among other programs visited were the Institute for Developmental Studies, Childrens Television Workshop, University of Kansas Early Childhood Center. Among the visitors to the New Nursery School were Professor Harry Beilin, City University of New York, and Professor Julian Stanley of Johns Hopkins.

12. Presentation and workshops, South Carolina Department of Education. Pre-Service Conference for Kindergarten Teachers and Aides, University of South Carolina, Columbia, South Carolina.

13. Consultant, Sumter Pre-Primary Project, Sumter, South Carolina.

14. Consultant, Buffalo, New York, Follow-Through.

Scheduled for October-November are:

1. Speech and demonstration - "Building Mathematical Concepts in Early Childhood." State Convention, Colorado Education Association.

2. National Convention, National Association for the Education of Young Children. This includes presentation of both research and curriculum of The New Nursery School, and assisting in the presentation of the Children's Television Workshop.

3. Speech and demonstration - Denver chapter of Association for Childhood Education International.

# # # # #

Mr. Carlos Leal gave the following speeches:

1. Speeches to two community church groups concerning the Chicano community.

2. Speeches to six college classes.

3. Speech to a group of potential college students.

Other:

*** Ten students from teacher preparation programs at Colorado State College and from Aims College received practical experience in working with young disadvantaged children.

*** Cooperative training efforts with the Regional Training Officer at Colorado State College were held.

*** Samples of "learning episode" films were available for demonstration purposes through the Instructional Materials Center of Colorado State College.

*** Cuts from a film made at The New Nursery School were used in a United States Information Agency film which toured the Soviet Union in summer, 1969.

VII. RESUME OF TESTING AND DATA COLLECTION PROGRAM

1968 -- 1969

Because of delayed funding, not all of the tests and data collection instruments were used at the time they were originally scheduled. Some tests designed to be pretests and posttests became only posttests. The data collected are in the process of being analyzed. The analysis will be in a separate report.

The following section gives a brief description of each instrument, tells when it was used, or when and to whom it was given. Samples of instruments developed or revised at the New Nursery School in this program year are included, as well as some developed in previous years.

CLASSROOM USE OBSERVATION

From the middle of January until the end of May the location and activity of each child and adult in the classroom was recorded at regular intervals. The observations were made during the time of highest activity and room use, usually the first hour of the session. After each recording, which took approximately ten minutes, the observer started over again until the hour was up. Four to six observations were usually made in the hour.

To make recording manageable and the results easier to interpret, activities were grouped as follows:

READING AND LISTENING

Records
Reading
Filmstrip stories
Viewmaster

SPECIFIC LANGUAGE ACTIVITIES

Lotto games
Language Master
Color lotto
Discussing photo album
Telephone

ART

Painting
Finger painting
Dough and clay
Soap suds painting
Drawing-chalk, crayon, pencil

SMALL MANIPULATIVE TOYS

Parquetry blocks
Puzzles
Hammer boards
"Is" - "Is Not" objects
Flannel boards - geometric shapes
Cubes
Lego
Bolts and Nuts
Nesting Cups
Counting frame
Cuisenaire rods

BLOCK AND VEHICLE PLAY

Unit blocks
Vehicles
Wooden people and animals

TYPING BOOTH ACTIVITIES

Typing
Chalkboard
Magnetic letters
Testing

PASSIVE OBSERVER

Just standing observing others; not participating in any activity at that time.

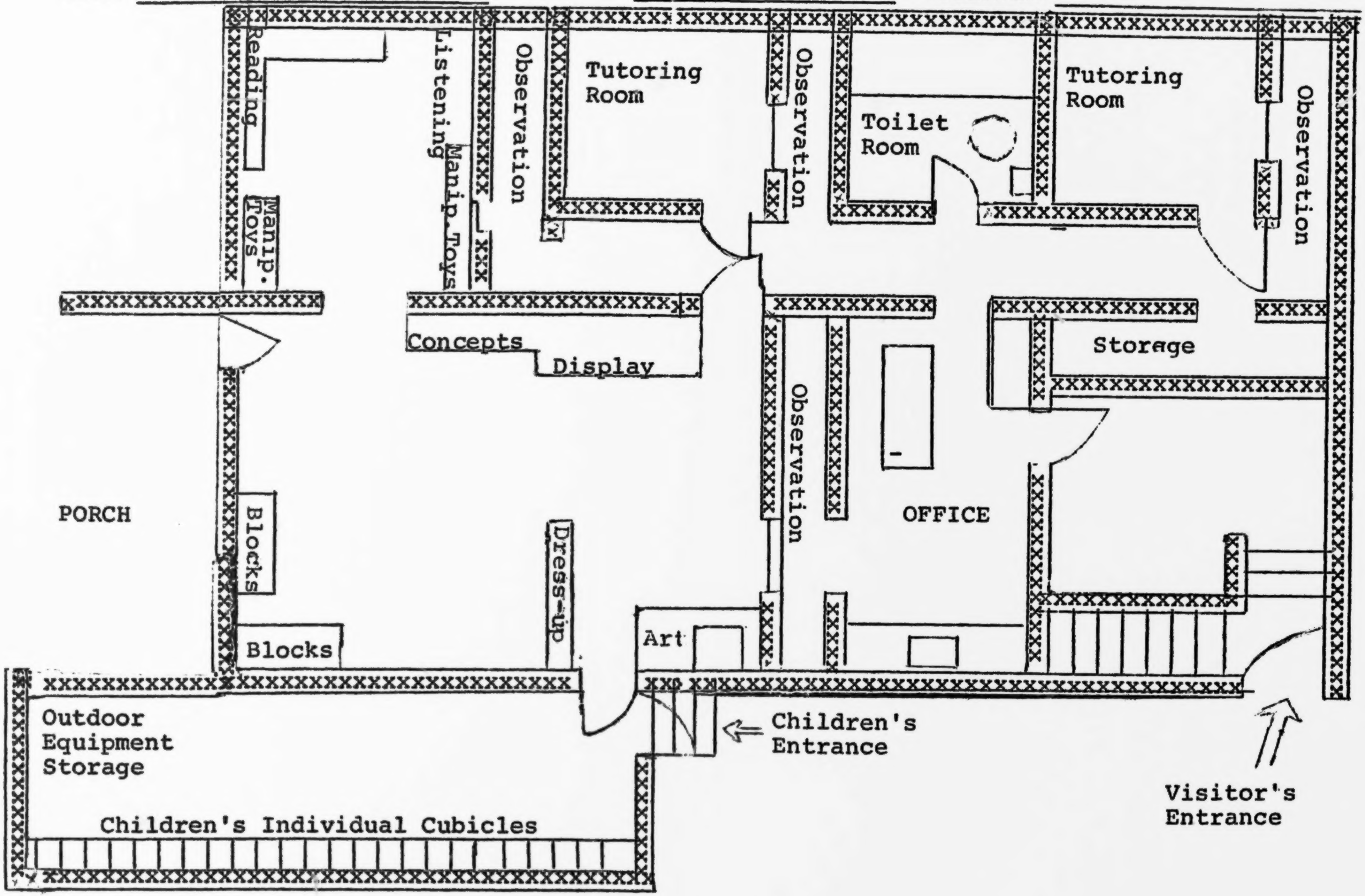
OTHER

Shadow play
Playing house
Dolls
Cards
Snacks
Bathroom
Observing fish
Dancing
Group time

Notations were made on a floor plan of the school as shown on the next page.

ROOM USE OBSERVATION

DATE ____________ TIME ____________ OBSERVER ____________


Reading
Listening
Observation
Tutoring Room
Observation
Toilet Room
Tutoring Room
Observation
Manip. Toys
Manip. Toys
Concepts
Display
Storage
Observation
OFFICE
PORCH
Blocks
Dress-up
Blocks
Art
Outdoor Equipment Storage
Children's Entrance
Visitor's Entrance
Children's Individual Cubicles

SYMBOLS: First and last initial will be used; in case of duplication, alternate symbols will be chosen.

At the end of the year a tally for each child was made from the observation sheets.

The total number of times each child was observed (100%) was pro-rated for each grouping. That is, if a child was observed 100 times and was being read to or listening to records ten of those times, a value of 10% was assigned to that category for that child.

As an example, Ben (not his real name) was observed 126 times. He was engaged in the following activities:

Reading and Listening - 32.5%
Art - 22.2%
Blocks - 24.6%
Specific Language Activities - 2.4%
Small Manipulative Toys - 7.1%
Typing Booth Activities - 5.6%
Other - 3.2%
Passive Observer 2.4%

The activities in which the child engaged in the classroom will be compared with the results of the other evaluations to see what relationship, if any, exists.

As a result of the systematic evaluation, possible modifications in the New Nursery School Program and recommendations to other programs may be made. Although analysis is still in progress, some tentative conclusions can be ventured. When an adult was available to read, the older children consistently chose that activity over almost all others. Toward the end of the year, constructive use of items from the dress-up area greatly declined, even though new items and equipment were added. Also, it was obvious that toward the end of the year, the children were spending a longer time at any given activity, even though no particular effort was made to achieve this - the child was still free to move to the activity of his choice at any time.

Preschool Inventory[1]

The Preschool Inventory is a standardized test developed to measure the child's performance in basic information and vocabulary; number concepts and ordination; concepts of size, shape, motion and color; concepts of time, object class, social function; visual-motor performance; following instructions; and independence and self help.

The test was administered by trained testers to the children at New Nursery School and Home Economics Preschool in May.

Weschler Preschool and Primary Scale of Intelligence[2]

Certified testers supplied by Colorado State College administered this test to the children at New Nursery School in September, 1968, and September, 1969. In September, 1969, it was administered to a comparison group of twenty public school kindergarten children who have cultural and sociological backgrounds similar to the children at New Nursery School but who have had no nursery school experience, and to the children who attended the New Nursery School in 1969 and are now enrolled in kindergarten.

Cincinnati Autonomy Test Battery (CAT-B)

The CAT-B was developed by Dr. Thomas J. Banta, University of Cincinnati, Cincinnati, Ohio, to measure autonomous function in problem solving. An adaptation by Gerald Brudenell was used.

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[1] Bettye M. Caldwell and David Soule, The Preschool Inventory, Educational Testing Service, Berkley, California, 1967.

[2] David Weschler, Weschler Preschool and Primary Scale of Intelligence, The Psychological Corporation, New York, 1967.

The test was administered by four trained testers to the children at New Nursery School and Home Economics Preschool in May.

Task Accomplishment Inventories

The Task Accomplishment Inventories include inventories for:

1. Color
2. Shape
3. Size
4. Location
5. Number
6. Same and different
7. Conjunctions (and/or) and negative and affirmative statements (is/is not)

The inventories are to evaluate the child's acquisition of specific concepts that are emphasized in the curriculum at New Nursery School. The inventories of color, shape, and location measure comprehension and production. No effective test of production was compiled for size, "same and different" or conjunctions and negative affirmative statements, and no test of comprehension for number was developed. These may be worked out at a later date, as may evaluation of selected intellectual processes.

Objects from the classroom were collected for each articular inventory and used as a test kit. The tester became acquainted with the children and then administered the tests informally in the classroom or in the play yard as the occasion and interest of the child permitted.

The inventories were administered to all New Nursery School children and to children enrolled at the Home Economics

Preschool at Colorado State College, whose scores are used as a comparison with those at New Nursery School. The inventories were administered from March through May. In addition, the color inventory was given at the New Nursery School in September, 1968.

The inventory of "same and different" was completed late in the school year and was administered in September 1969.

The inventories of conjunction and negative and affirmative statements were taken from the Bellugi-Klima Test of Grammatical Comprehension. They were completed and administered in September, 1969. (See the Bellugi-Klima Test of Grammatical Comprehension below)

Bellugi-Klima Test of Grammatical Comprehension

A revised version of the Bellugi-Klima Test of Grammatical Comprehension was formulated at New Nursery School, and test kits were made for each test item --- sixteen kits in all. A score sheet was devised to correspond with each test kit. When given directions as specified on the test kit, the child responds by manipulating the objects from the kit to demonstrate his comprehension of the grammatical construction of the sentence.

In the process of revising and developing the test, a tester gave sample tests to six children. A booth with a one-way observation window was used. Corrections and suggestions were made as another tester viewed the procedure. A tester seated outside and viewing through the window recorded the child's responses on a score sheet. A video recording was made of several testing sessions. Dr. Courtney Cazden reviewed the video tapes and added her suggestions. With these corrections and suggestions incorporated into the test, the testers then administered the test to the children. Nine kits were used at the first session with each child; then the remaining six kits were used at the second session.

This test was administered to New Nursery School children and to the children at the Home Economics preschool in April through May. Interest in this test was high, both by children and testers.

Self Concept Interview

The Self Concept Interview was compiled by Glen Nimnicht and Ann Fitzgibbon. (1967) It was designed to evaluate the child's self image as related to school. A picture resembling the child is used. Specific questions are asked about the child in the picture and the response scored on a scale of 0-2.

The typing booth assistants and four testers were trained to conduct the interview. The New Nursery School and Home Economics Preschool children, and all children in kindergarten through third grade were interviewed during April and May.

Some parts of this interview may need revision.

"C" Test

The "C" Test was developed at New Nursery School in previous years to test the ability of a child to categorize or group two familiar objects into meaningful pairs. The test consists of a series of ten stimulus items and ten response items.

Typing booth assistants and two testers administered the test after being trained. It was given to the New Nursery School children in September, March and May and to children at the Home Economics Preschool in May.

Teacher Behavior Rating Scale

The rating scale uses Stanley Cooper-Smith's (1968) behavior rating form to evaluate self concept. Dr. Cooper-Smith is a professor of psychology at the University of California at Davis, California.

The rating scale was distributed to the teachers of New Nursery School children and to those teachers in whose classrooms were children who had attended New Nursery School or children who were comparison groups. This form was distributed in April and collected in May.

Teacher Class Ranking Form

The ranking form was devised at New Nursery School to collect the teacher's opinion of the child's standing within his class. The opinion is given on a percentage scale from top 10% to the lower 10%.

The ranking sheet was distributed to the public school teachers of all children who had attended New Nursery School and the children who were in comparison groups.

Typing Booth Information

Typing booth records, which show the circumstances under which the child comes to the booth, the number of times he is asked to type, the number of times he types, the time he spends typing, and the activities in which he engages while in the booth will also be correlated with the characteristics of children (measured by the testing program and selected demographic information).

Other Information

1. Attendance for all children in the research program.
2. Birthdates for all children in the program.
3. Scores of the children in the experimental and comparison groups on standardized tests given in the public schools.

Oralie McAfee
Dr. Dale Nebel
Gloria Arnold

NEW NURSERY SCHOOL
Colorado State College
May, 1969

GRAMMATICAL COMPREHENSION TEST

Ursula Bellugi-Klima
March, 1968

The following tests of grammatical comprehension are an extension and revision of those described in the ERIC Document, Evaluating the Child's Language Competence, by Ursula Bellugi-Klima. The document was published by the National Laboratory on Early Childhood Education, and is available from the ERIC Document Reproduction Service, 4936 Fairmont Avenue, Bethesda, Maryland, 20014.

The organization of the tests and the additions and deletions were done with the approval and counsel of Dr. Bellugi-Klima. Dr. Courtney Cazden and Dr. Dale Nebel acted as consultants. The organization is intended to facilitate administration. For full comprehension of the intent of the tests, the reader and any potential users **should** refer to the original document.

The tests of grammatical comprehension are "proposals based on linguistic theory, psycholinguistic research, and developmental studies of children's speech."[1]

The problems are set up on approximate levels of difficulty, based on appearance of constructs in children's speech, other comprehension tests, and proposed linguistic research.

They utilize readily available objects which the child is to manipulate in response to a direction.

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[1] Ursula Bellugi-Klima, "Evaluating the Child's Language Competence," National Laboratory Early Childhood Education, (Illinois University, Urbana, Illinois), 1968, p. 6.

> The objects for each problem should be placed on the table in such a way that they do not give cues to the solution of the problem (in terms of ordering or other such cues) and in such a way that the child has to make some change or movement to demonstrate comprehension of the problem. If the problem has more than one part, it need not necessarily be given in any fixed order (mixing up orders of presentation minimizes the effects of 'set'). The objects should be replaced in their original indeterminate position before asking another part of the problem.
>
> The examiner should make sure at the on-set of the problem that the child understands the words and actions involved. For example, for the problem, "The boy is washed by the girl," the examiner would identify the boy doll and girl doll, and demonstrate how one washes the other, being careful not to give any cues to the problem. He might say for example, "This is how we wash,"... then check the child's understanding of boy, girl, and wash before beginning. In the process it might be wise to change the order of presentation of boy and girl, so that no cues to ordering are given. Then the objects are set up in a standard way and the problem can be given.[2]

In the suggested organization of Dr. Bellugi-Klima's test, the objects needed to test for each item are separated and organized in individual boxes. The grammatical construction to be tested, the materials list, suggestions for arrangements, and directions for administration are pasted on the lid of the box. Cigar boxes or other boxes with flip-top lids are ideal. If desired they can be covered with contact paper. A rack to hold the boxes is convenient, but not essential.

Having the objects in separate boxes has several advantages.

1. It helps focus the subject's attention on the materials with which he should be working.
2. It eliminates the necessity of having the subject look over (or the tester select from) a large array of items to select the one under discussion.
3. It minimizes the time necessary for arranging the materials. In some cases the subject can work from the box.
4. It offers the opportunity to do the test in frequent short settings.

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[2] Ibid., p. 5.

5. It makes randomizing easier. If desired, one or two items from a box may be given, then the tester can go to another box.

The boxes are labeled 1, 2, ... 16, so they can be easily identified. Listed below is the information to be placed on each box. To compile the objects necessary for administration, see the equipment list under each item.

A recording sheet is used for each child. Each direction stated to the child is listed, with spaces left to mark correct and incorrect responses and to record comments.

1.

ITEM: ACTIVE VOICE

Materials: Boy doll with wash cloth in one hand, spoon in the other hand, Girl doll with wash cloth in one hand, spoon in the other hand, Toy dog, standing, toy cat, standing.

Arrangement: Put on the table only the objects essential to carrying out a specific direction.

Directions: Say to the subject: "Show me..........

a. The boy washes the girl.
b. The girl feeds the boy.
c. The cat chases the dog.
d. The cat bites the dog.

2.

ITEM: PREPOSITIONS, *in*, *into*, *on*, *under*

Materials: 1 block, 2 empty paper cups, 1 clear plastic bag tied shut, with a dog inside; 1 empty plastic bag, 1 toy dog identical to the one tied inside the bag.

Arrangement: Be sure both cups are available--one cup with rim down, one cup rim up.

Directions: Say to the subject..........

a. Put the block into the cup.
b. Put the block under the cup.
c. Put the block on the cup.
d. Put the dog on the bag.
e. Put the dog under the bag.
f. Show me: The dog is in the bag.

3.

ITEM: SINGULAR AND PLURAL NOUNS

Materials: four blocks, four rocks, four crayons. In each case, one object is loose and three are tied in a plastic bag.

Arrangement: Place all objects on the table.

Directions: *Don't name the objects as you lay them out.* Ask the child his names for them if desired. Some children may say rocks, some may say stones. Say to the subject..........

a. Give me the block.
b. Give me the crayons.
c. Give me the rocks.
d. Give me the blocks.
e. Give me the rock.
f. Give me the crayon.

4.

ITEM: POSSESSIVES

Materials: Father-son dolls; mother horse toy, baby horse toy; mother cat toy; toy truck with wheel that is loose and separated from the truck, and a larger wheel.

Arrangement: Place objects on the table. Replace items each time used.

Directions: Say to subject..........

a. Show me the boy's daddy.
b. Show me the horse's mother.
c. Show me the wheel's truck.
d. Show me the daddy's boy.
e. Show me the truck's wheel.

5.

ITEM: NEGATIVE/AFFIRMATIVE STATEMENTS

Materials: 1 doll, with hat, of rigid construction; 1 doll with flexible limbs, without a hat.

Arrangement: Be sure flexible doll is in sitting position. Put dolls in front of subject.

Directions: Say to subject..........

a. Point to: The doll cannot move her arms.
b. Point to: The doll without a hat.
c. Point to: The doll is sitting.
d. Point to: The doll with a hat.

e. Point to: The doll is not sitting
f. Point to: The doll can move her arms.

6.

ITEM: NEGATIVE VS. AFFIRMATIVE QUESTIONS

Materials: 2 articles of clothing (sock, glove), 2 edible objects in separate plastic bags (cracker, tortilla or biscuit), 2 or 3 objects such as stones, sticks, small blocks.

Arrangement: Place objects on the table so all are visible.

Directions: Say to subject..........

a. Which of these things can you eat?
b. Which of these things can't you wear?
c. Which of these things cannot be eaten?
d. Which of these things can't be eaten?
e. Which of these things can you wear?

7.

ITEM: SINGULAR/PLURAL (WITH NOUN AND VERB INFLECTION)

Materials: Two girl dolls in standing or walking position; two toy dogs in standing or running position.

Arrangement: Place objects on the table.

Directions: (Demonstrate to the subject how he can show *run*, *jump*, *lie down*, and how *both* can run or jump by using both hands simultaneously. Say to subject..........

a. Show me: the girl walks.
b. Show me: the dogs run.
c. Show me: the girls jump.
d. Show me: the dog lies down.
e. Show me: the dogs jump.
f. Show me: the girl jumps.

8.

ITEM: MODIFICATION

Materials: Round box, square box, block, small button, large button.

Arrangement: Place objects on the table. Replace items in original location after each action.

Directions: Say to subject..........

a. Put the block in the round box.
b. Put the little button in the round box.
c. Put the big button in the square box.
d. Put the block in the square box.

9.

ITEM: NEGATIVE/AFFIRMATIVE STATEMENTS WITH CONTRACTIONS

Materials: 1 doll, with hat, of rigid construction; 1 doll with flexible limbs, without hat. (Box 5 can be used)

Arrangement: Be sure flexible doll is in sitting position. Put dolls in front of subject.

Directions: Say to subject..........

a. Point to: the doll can't move her arms.
b. Point to: the doll isn't sitting.
c. Point to: the doll doesn't have a hat.
d. Point to: the doll that isn't standing.

10.

ITEM: NEGATIVE AFFIX

Materials: Small toy truck with load of stones glued in place; small truck empty; pair of doll shoes, one laced and tied, one has lace missing; 1 piece of paper, folded; one piece of paper unfolded.

Arrangement: Place objects on the table.

Directions: Say to subject, "Show me..........

a. the shoe is tied
b. the paper that is unfolded
c. the truck is unloaded
d. the paper that is folded.

11.

ITEM: REFLEXIVE VERB

Materials: One flexible boy doll (John) with wash cloth attached to one hand and spoon attached to the other hand. One flexible boy doll (Bill) with wash cloth attached to one hand and a spoon attached to the other hand.

Arrangement: Both dolls on the table.

Directions: Demonstrate how the actions may be done. Identify the dolls as John and Bill. Say to the subject, "Show me..........

a. John washes him.
b. John washes himself.
c. Bill feeds himself.
d. Bill points to himself.
e. Bill feeds him.
f. Bill points to him.

12.

ITEM: COMPARATIVES

Materials: Plastic bag with three small rocks in it, a plastic bag with 10 or more rocks in it, one plastic bag with a small amount of clay, one bag with perceptibly larger amount of clay. One short stick (shorter than the flat ones below), one longer stick of the same diameter and color, (longer than the flat ones, dowel rods are acceptable), one flat stick that is narrow, ¼ x ½ x 4; one flat stick (of the same thickness and same length) that is perceptibly wider, ¼ x 2 x 4.

Arrangement: Place the objects on the table.

Directions: Say to the subject, "Show me..........

a. The bag with more rocks in it.
b. The narrower stick.
c. The bag with less clay in it.
d. The bag with fewer rocks in it.
e. The shorter stick.
f. The bag with more clay in it.
g. The longer stick.
h. The wider stick.

13.

ITEM: PASSIVES

Materials: Toy dog in standing or running position; toy cat in standing or running position, boy doll with wash cloth attached to his hand, girl doll with wash cloth attached to her hand.

Arrangement: Place objects on the table.

Directions: Say to subject, "Show me..........

a. The dog is chased by the cat.
b. The boy is washed by the girl.
c. The cat is chased by the dog.
d. The boy is pushed by the girl.
e. The girl is washed by the boy.

14.

ITEM: CONJUNCTION

Materials: Plastic spoon, fork, knife, crayon, pencil

Arrangement: Place objects on the table.

Directions: Say to the subject, "Give me..........

a. A fork and a spoon.
b. A crayon or a pencil.
c. Something that is either a fork or a spoon.
d. A crayon and a pencil.
e. A fork or a spoon.
f. Something that is neither a crayon nor a pencil.

15.

ITEM: COMPARATIVES (DOUBLE)

Materials: "Master" stick ½ x 3/4 x 5½ (should be marked so the tester can identify it);
1 flat stick same length as master stick, but thinner; ¼ x ½ x 5½
1 flat stick same length as master stick, but thicker; 3/4 x 1 x 5½
1 flat stick same thickness as master stick but shorter; ½ x 3/4 x 2½
1 stick same thickness as master stick but longer, ½ x 3/4 x
1 stick longer and thicker; 3/4 x 1 x 6½
1 stick longer and thinner; ¼ x ½ x 7½
1 stick shorter and thicker; 3/4 x 1 x 3
1 stick shorter and thinner; ¼ x ½ x 3

Arrangement: Place sticks on the table.

Directions: Holding the master stick so subject can see it easily, say..........

a. Give me a stick that is shorter and thicker than this one.
b. Give me a stick that is longer and thicker than this one.
c. Give me a stick that is shorter and thinner than this one.
d. Give me a stick that is longer and thinner than this one.

16.

ITEM: REFLEXIVE VS. RECIPROCAL

Materials: Two boy dolls, flexible, with wash cloth attached to one hand and spoon attached to other hand. (Box 11 can be used)

Arrangement: Place the dolls on the table.

Directions: Say to the subject, "Show me..........

a. They wash themselves.
b. They feed each other.
c. They wash each other.
d. They feed themselves.

Oralie McAfee
Gloria Arnold
4/69

Grammatical Comprehension Test
Ursula Bellugi-Klima
Revision 4/69

Note: Number indicates item
Letter indicates order
in test

NAME ______________________

DATE ______________________
Month Day Year

EXAMINER ______________________

Direction	Response		Comments
	Corr	Incorr	
1. a. The boy washes the girl.			
b. The girl feeds the boy.			
c. The cat chases the dog.			
d. The cat bites the dog.			
2. a. Put the block into the cup.			
b. Put the block under the cup.			
c. Put the block on the cup.			
d. Put the dog on the bag.			
e. Put the dog under the bag.			
f. Show me: the dog is in the bag.			
3. a. Give me the block.			
b. Give me the crayons.			
c. Give me the rocks.			
d. Give me the blocks.			
e. Give me the rock.			
f. Give me the crayon.			
4. a. The boy's daddy.			
b. The horse's mother.			
c. The wheel's truck.			
d. The daddy's boy.			
e. The truck's wheel.			

Direction			Response		Comments
			Corr	Incorr	
5.	a.	The doll cannot move her arms.			
	b.	The doll without a hat.			
	c.	The doll is sitting.			
	d.	The doll with a hat.			
	e.	The doll is not sitting.			
	f.	The doll can move her arms.			
6.	a.	Which of these can you eat?			
	b.	Which things can't you wear?			
	c.	Which things cannot be eaten?			
	d.	Which things can't be eaten?			
	e.	Which things can you wear?			
7.	a.	The girl walks.			
	b.	The dogs run.			
	c.	The girls jump.			
	d.	The dog lies down.			
	e.	The dogs jump.			
	f.	The girl jumps.			
8.	a.	Put the block in the round box.			
	b.	Put the little button in the round box.			
	c.	Put the big button in the square box.			
	d.	Put the block in the square box.			

Direction			Response Corr	Response Incorr	Comments
9.	a.	The doll can't move his arms.			
	b.	The doll isn't sitting.			
	c.	The doll doesn't have a hat.			
	d.	The doll that isn't standing.			
10.	a.	The shoe is tied.			
	b.	The paper that is unfolded.			
	c.	The truck is unloaded.			
	d.	The paper that is folded.			
11.	a.	John washes him.			
	b.	John washes himself.			
	c.	Bill feeds himself.			
	d.	Bill points to himself.			
	e.	Bill feeds him.			
	f.	Bill points to him.			
12.	a.	The bag with more rocks in it.			
	b.	The narrower stick.			
	c.	The bag with less clay in it.			
	d.	The bag with fewer rocks in it.			
	e.	The shorter stick.			
	f.	The bag with more clay in it.			
	g.	The longer stick.			
	h.	The wider stick.			

Direction	Response		Comments
	Corr	Incorr	
13. a. The dog chased by the cat.			
b. The boy is washed by the girl.			
c. The cat is chased by the dog.			
d. The boy is pushed by the girl.			
e. The girl is washed by the boy.			
14. a. A fork and a spoon.			
b. A crayon or a pencil.			
c. Something that is either a fork or a spoon.			
d. A crayon and a pencil.			
e. A fork or a spoon.			
f. Neither a crayon nor a pencil.			
15. a. A stick shorter and thicker.			
b. A stick longer and thicker.			
c. A stick shorter and thinner.			
d. A stick longer and thinner.			
16. a. They wash themselves.			
b. They feed each other.			
c. They wash each other.			
d. They feed themselves.			

Oralie McAfee
Gloria Arnold
Dr. Elizabeth Rave

THE NEW NURSERY SCHOOL
Colorado State College
September, 1969

TASK ACCOMPLISHMENT INVENTORIES

These Inventories are still in the process of being revised and refined. They have been tested only with a small number of children in Greeley, Colorado. Suggestions from other users are appreciated. These should be sent to The New Nursery School, 1203 4th Street, Greeley, Colorado. 80631

RATIONALE:

"To say that the children are 'forming concepts' in their play is not enough. One needs to know what concepts are revealed and at what level of adequacy."[1]

Task Accomplishment Inventories can help teachers in early childhood classrooms evaluate an individual child's ability to comprehend and use selected concepts which are appropriate for inclusion in a program which considers a child's social, emotional, physical, and intellectual growth.

In a learning environment such as that recommended for Head Start and Follow Through, it is often difficult to specify what children might be learning, and even more difficult to evaluate what they have learned. The children are moving around, playing with blocks, puzzles, and other manipulative toys; they are singing, dancing, pouring water and sand, painting, reading and dramatizing. Some of these activities may be planned by the teachers with specific educational goals in mind; others will be initiated and carried out by the children with little or no teacher direction. Perhaps because of past emphasis on the emotional, social, and physical well being of the nursery school and kindergarten child, not all early childhood educators are able to appraise adequately the cognitive elements in nursery school curricula. As a result, teachers often do not take advantage of learning opportunities and are unable to say what educational goals are being achieved.[2]

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[1] Millie Almy, "Spontaneous Play: An Avenue for Intellectual Development," Young Children, 22 (May, 1967) 265-77.

Teachers in early childhood education have relied primarily upon ancedotal records for classroom evaluation of cognitive development. Such records require much time and expert observation, for which there is little guidance available. Systematizing evaluation as is done in these Inventories should make assessment of behavior simpler.

SPECIFICATION OF PERFORMANCES DESIRED:

Certainly the most important goals of early childhood education cannot be precisely defined or evaluated. The complexities and unknowns in children's behavior---including cognition, or perhaps especially cognition---do not allow such precision.

However, when specific goals have been determined, they will be more readily and easily attained if careful thought is given to determining what is involved in attaining those goals, and how such attainment may be evidenced. For young children's behavior cannot be assessed by responses to paper and pencil tasks; it must be measured in terms of what they build, say, sort, draw or paint, select, reject, and so forth.

For this reason, the Inventories try to be as exact as possible in specifying what to watch for in evaluating. As an example, many teachers of young children want them to "know the colors." But does that mean to differentiate between the colors by sorting and matching, to point to a specific color when he hears the color name, or to say the name of the color when he sees an example of it? Probably the teacher has all these goals in mind. However, the teaching strategies to enable the child to do these tasks differ. The technique used to evoke a non-verbal response to something the teacher has said differs from that used to elicit a verbal response from the child's store of concepts. The latter task is usually far more difficult, especially for disadvantaged children. Also, children who can do one task cannot necessarily do the other.

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[2] Fred Powledge, To Change A Child (Chicago: Quadrangle Books, 1967).

The acquisition of any of the concepts in the inventories can be defined operationally in a number of ways. The teacher who is evaluating may, in fact, observe many of these behaviors. Mental or written notes of these other behaviors will supplement and reinforce the Inventories.

Although the child's acquisition and ability to use these concepts can be evaluated in informal classroom situations, suggestions are given for a fairly definite approach. This is done for several reasons.

1. To make sure the situation is evaluating what the recorder says it is.
2. To help inexperienced teachers and assistants define the behavior that gives evidence of accomplishment.
3. To make the evaluation situation replicable.
4. To enable controlled comparisons to be made between children and groups of children.

DELINEATION OF CONCEPTS TO BE EVALUATED:

Certainly no one can say which cognitive tasks and specific concepts are essential for intellectual development of the prefirst grade child.

Even with the growing body of research and observation on cognition, there is little in the way of specific guidance for curriculum development. Selection of items for inclusion in these inventories was influenced by several considerations:

*Research studies indicating what concepts most children of school entrance age have acquired. For example, according to Brownell,[3] three out of four children of school entrance age know the terms "square" and "circle."

*Analysis of the tasks children should be able to perform in order to succeed in the primary curriculum. For instance, in primary programs much emphasis is placed upon comparing and contrasting pictures, letters, sounds, and objects using the terms "same" and "different." Yet little emphasis is placed upon teaching the meaning of these terms. The child who does not have a firm grasp of these concepts will almost certainly be confused.

*Controlled comparisons of advantaged and disadvantaged children's acquisition of certain concepts, such as color. A child who lacks a concept most other children have acquired and are using probably needs some help.

*Current thinking by scientists, linguists, and mathematicians concerning those elements of their respective disciplines that are basic to understanding and "thinking." There is considerable agreement among these specialists concerning the importance of a small set of prepositions, comparatives, logical connectives, and noun and verb inflections, in contrast to the inexhaustible list of nouns and verbs.

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[3] W. A. Brownell et al. Arithmetic In Grades I & II: "A Critical Summary of New And Previously Reported Research," Duke University Research Studies in Education, No. 6 (Durham, North Carolina: Duke University Press, 1941.)

*Classroom teachers' and assistants' judgment of concepts and processes which are appropriate for young children---which they can learn and will enjoy learning.

Concepts to be evaluated are:

1. Color
2. Number
3. Shape
4. Relative Size
5. Relative Location or Position
6. Conjunction (and/or)
7. Negative/Affirmative (is/is not/ isn't)
8. "The same as"---"Different from (than)"

These do not encompass all elements of a preschool child's intellectual development. Rather, they are examples of systematic evaluation of selected elements, samplings of the child's performance at a particular time. Teachers who wish to evaluate other key concepts, such as "more-less," or "first-last," can use the inventories as examples to construct other inventories.

ADMINISTRATION AND USE:

The Inventories are designed to be administered in the classroom or the play yard by the teacher, assistant, or volunteer, using objects and materials with which a child is familiar. Such a situation is far less threatening to a young child than a "test," and far easier for a teacher with limited staff assistance to administer. Often informal observation gives as good a result as direct administration. Keep administration casual, a part of classroom activities. Most of the inventories provide good learning situations as well as evaluation.

Teachers who want to use the inventories should select those which pertain to their stated objectives; it is not at all necessary to use all of them. Nor should a teacher be dismayed if she cannot get a particular child to participate.

There is some evidence[4] that children without many experiences with pictures in books and magazines may not respond the same to picures as they do to objects. Therefore, classroom objects are used instead of commercially prepared pictures. This places much responsibility on the administrator for the selection of these objects. Unless careful thought is given to selection, the child may be confused, may be unable to respond, or the evaluation may be of something other than that which is intended.

Each inventory includes a list of objects appropriate to use for that inventory, procedural guides, "tips" to help in administration, and a recording sheet.

The items in each inventory have been randomized. That is, they are ordered in such a way that the child will not pick up clues from one question that will enable him to answer another that he might not know. Testers may deviate from the suggested order, but should retain a random order.

Attempting to assess young children's knowledge of specific items is often difficult. They are easily distracted, sometimes unwilling to attend to a task for more than a short period, sometimes just not interested in the tester's games. The purpose of these Inventories is to get an evaluation that is as close to the child's top level of performance as possible. Therefore, considerable latitude is given for number of attempts and time allowed. However, all these should be noted in the "Comments" section, because the child who completes a task quickly and accurately with no hesitation differs from the child who finally gets most responses correct, but is so distractable or unsure of himself that two or three attempts by the tester are necessary.

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[4] I. E. Sigel et al. Journal of Negro Education, "Categorization Behavior of Lower and Middle-Class Negro Children: Differences in Dealing with Representation of Familiar Object" (1966) 35: 218-229.

This does not mean that the child is asked the same question again and again, so that he guesses until he gets it right. It does mean that some tester judgment is allowed for making sure the child understands what is wanted, or that a test half completed can be returned to tomorrow.

The purpose for which the Inventories are given will determine some of the details of administration.

Originally, the Inventories were designed to assess the effectiveness of a compensatory preschool program. This was done in two ways:

1. By an ideal, "absolute" level of performance. That is, ideally, by the time their preschool experiences were over all the children would be able to succeed on all items, since all items are deemed necessary for effective performance in communication and school tasks.
2. By comparison with an advantaged group's performance on identical inventories, to determine if the preschool program was effective in bringing the disadvantaged group's performance closer to the advantaged groups.

In these circumstances, close control over the testing situations is necessary. It is desirable, for example, to evaluate within a period of a week or so all the children's ability to count objects, then go to another Inventory to evaluate another ability. Also, the Inventories are given "pre" and "post," which dictates that they are given as close to the beginning and the end of the school year as possible.

For evaluation of individual and class needs, the inventories may be administered at any time, and in any order. However, it is suggested that the simple ones - color names, counting, and geometric shapes -- be given first to familiarize testers and children with the procedures.

The Task Accomplishment Inventories are not designed for "grading." Primarily, they are diagnostic tools to help teachers ascertain where a child may need specific help with an idea, or where he has mastered an idea and needs to have activities introduced to help him extend, clarify, and use the knowledge he has. No emphasis should be placed upon a total score or even a score on a particular inventory, except as it is used as a guide for planning and revising curriculum.

Perhaps many of the children in the room are restricted in their concept of size to only "big" and "little," or "mama" and "baby." Then the teacher would want to plan many activities to help them learn "tall," "long," "short," "wide," and so on. She would also want to watch for learning opportunities arising in spontaneous play. "The other children have all the longest blocks; see if you can use some shorter ones in your building." If only one or two children need help to grasp this concept, individual emphasis can be planned for them. If all the children already comprehend the terms describing varying dimensions of size, then activities to help children express these terms in observations and descriptions might be planned.

If the school is to make "taking the child where he is" more than a cliche', it must have some idea "where he is." Task Accomplishment Inventories can help teachers in early childhood classrooms know where to start on some of the key concepts necessary for future learning.

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NNS
9/69

THIS INVENTORY IS TO EVALUATE THE CHILD'S COMPREHENSION AND PRODUCTION OF COLOR NAMES.

Equipment:

A set of 3" x 9" cards made with stiff cardboard and construction paper, in the colors, red, yellow, blue, white, black, orange, purple, green, brown. A peg board with pegs in these colors can be used, as may any other teaching device with which the child might be familiar.

Procedure:

To test comprehension, name a color from a group of objects of the above colors. The child should be able to choose an object of the specified color. Example: *Gary, hand me the blue peg*, or *Point to the blue card.*

To test production, ask the child the color of an object. The child should be able to name the color. Example: *What color is this card?* (cube, peg.)

Comments:

Complete the "designates by selecting" column, then the "designates by labeling" so there will be no "clues," such as might result from *Point to the blue card*, then *What color is that card?* (blue). A set of color cards was found to be efficient and easy to handle.

Use the "comments" column to note the number of attempts necessary to complete the test, any other colors (pink, gray) the child might note in conversation, or tester's observation. It may be necessary to inventory some children by observing the child while he is interacting with a teacher. This was found to be necessary when the child was very shy and would not respond to a tester.

3/12/69

CHILD'S NAME ____________________

TASK ACCOMPLISHMENT:
Comprehension & Production
of Color Names

TEST DATE ____________________
Month Day Year

EXAMINER ____________________

	DESIGNATES COLOR BY SELECTING		DESIGNATES COLOR BY LABELING	
	correct	incorrect	correct	incorrect
RED				
YELLOW				
BLUE				
WHITE				
BLACK				
ORANGE				
PURPLE				
GREEN				
BROWN				
TOTAL CORRECT				

COMMENTS:

NNS
9/69

THIS INVENTORY IS TO EVALUATE THE CHILD'S COMPREHENSION AND PRODUCTION OF NAMES DESIGNATING COMMON PLANE GEOMETRIC SHAPES.

Equipment:

A circle, square, triangle, rectangle, and diamond of cardboard, construction paper, or felt. Other objects such as puzzle pieces or attribute blocks might be used. Shapes should be all one color to eliminate the possibility of clues or confusion from color.

Procedure:

To evaluate comprehension, as the child to select a specified shape. Example: *Hand me a circle, Point to the square.*

To evaluate production, ask the child to name the specified shape. Example: Tester holds up or points to the object and asks, *What shape is this?* or *This is a* _________.

Comments:

Complete the "designates by selecting" column, then the "designates by labeling," so there will be no "clues" such as might result from *Point to the circle*, followed by *What is the name of that shape?* (the circle). The shapes cut from felt or heavy construction paper are easily kept together and readily available to display and use in a testing situation.

Use the comments column to note any information that would aid in evaluating the child's ability to do the tasks. For example, a child may perceive these shapes in his surroundings and mention them in conversation. *The buttons on my dress are the shape of a circle.* The information desired on the inventory may be observed as a teacher works with a child. This should be noted also.

CHILD'S NAME ____________________

TASK ACCOMPLISHMENT:
Comprehension & Production
Geometric Shapes

TEST DATE ____________________
Month Day Year

EXAMINER ____________________

	DESIGNATES SHAPE BY SELECTING		DESIGNATES SHAPE BY LABELING	
	correct	incorrect	correct	incorrect
CIRCLE				
TRIANGLE				
SQUARE				
RECTANGLE				
DIAMOND				
TOTAL CORRECT				

COMMENTS:

NNS
9/69

THIS INVENTORY IS TO EVALUATE THE CHILD'S ABILITY TO COUNT

Equipment:

Objects such as cubes, counting sticks, marbles, or pick-up sticks, and a flat box to hold them.

Procedures:

Note child's ability to rote count (knowledge of number names) by saying the counting numbers in order without referring to external objects. Example: *Count as far as you can. Start with one, two ....* Record highest figure of two tries, or the tester may use his judgment of whether the names given by the child are a consistent sampling.

Note a child's ability to determine the cardinal number of a set by rational counting. Underestimate the child's ability initially and do not ask the impossible. Start with a set of three or four objects in the center of the box for the three year old or inexperienced child. If the child is correctly counting the objects, continue to push objects toward the center of the box. Push objects for the child to count toward the center of the box until he is unable to continue the rational counting process. (This procedure seems to aid in keeping the child counting. He tends to begin again with "one" if he runs out of available items and has to start again.) Record the highest cardinal number the child correctly determines. The tester may want to repeat the procedure if it is thought a true indication of the child's ability was not obtained.

Record in the comments column any information pertinent to the evaluation, as for example, if a teacher obtained the information while the recorder observed. Record the number of attempts to secure the sampling in the comments section.

NAME ______________________________

TASK ACCOMPLISHMENT:

DATE ______________________________
Month Day Year

Rote counting
Rational counting

EXAMINER ______________________________

Rote counting:

Number to which child counts correctly:

Comments:

Rational counting:

Number to which child counts objects correctly:

Comments:

NNS
9/69

THIS INVENTORY IS TO EVALUATE THE CHILD'S COMPREHENSION OF THE CONJUNCTIONS AND AND/OR, AND NEGATIVE AND AFFIRMATIVE STATEMENTS USING IS, NOT AND ISN'T*

Equipment:

A small box to use as a container; a fork, spoon, crayon, and pencil. Other common classroom or household items might be used. The above are used in the directions. The objects used in the evaluation should be known to the child so he is evaluated only on his ability to comprehend the meaning of "and/or," "is/is not."

Procedure:

Work directly from the box or place the objects on the table in front of the child. For evaluating say to the child, *Hand me a fork and a spoon*, or *Hand me a pencil or a crayon.* For evaluating is, is not, and isn't, say to the child, *Hand me something that is a crayon*, or *Hand me something that is not a spoon.*

Comments:

Please use the comments column to note any pertinent information concerning the evaluation such as number of attempts to test the child, the setting and circumstances of testing, and if other objects are used. For example, in order to obtain the needed information, it may be necessary for the tester to observe while the teacher works with a shy child.

*Note: Portions of this inventory are taken from Ursula Bellugi Klima's, Tests of Grammatical Comprehension.

Klima, Ursula Bellugi. Evaluating the Child's Language And Competence, National Laboratory for Early Childhood Education, University of Illinois, Urbana, Illinois, 1968.

TASK ACCOMPLISHMENT:
Comprehension of Conjunctions - and/or
Negative/Affirmative statements - is/is not

CHILD'S NAME ________________

TEST DATE ________________
Month Day Year

EXAMINER ________________

DIRECTIONS	CORRECT	INCORRECT
CONJUNCTION: AND/OR "hand me ... 1. a fork and a spoon		
2. a crayon or a pencil		
3. a crayon and a pencil		
4. a fork or a spoon		
NEGATIVE/AFFIRMATIVE - IS/IS NOT "Hand me something that ... 1. isn't a fork		
2. is not a pencil		
3. is a spoon		
4. is not a crayon		
5. isn't a doll		
6. is a crayon		

COMMENTS:

NNS
9/69

THIS INVENTORY IS TO TEST COMPREHENSION OF THE TERMS "THE SAME AS" AND "DIFFERENT FROM."

Equipment:

Use classroom objects such as beads, parquetry or attribute blocks, counting cubes, rings from the color cone, and so forth.

Objects to evaluate "same" and "different" color, size and shape are given as examples. Other attributes could be used; they should, however, be ones with which the child is familiar so he is not presented with the additional problem of identification of unfamiliar words. Space is left for additional items such as same length and same sound.

Procedure:

To minimize the interference from extraneous elements, select objects that are identical in every respect except the one being evaluated. For example, in evaluating "same color" a grouping of several colors of round pegs could be used. Hold up a peg and say, *Find another peg the same color as this one*, or *Find a peg that is a different color from (than) this one.*

Comments:

Unless the comparison or contrast is specified, the child may well be responding on a basis other than what the evaluator had in mind. For example, the teacher might show the child two blocks---a unit and a double unit and ask, *Are these the same?* If the child says *yes* he is as correct as if he said *no*, for they are indeed the same color, made of the same substance, both oblong, etc. They differ from each other in length.

Either "different from" or "different than" is acceptable usage. Use whichever seems natural.

NAME ______________________

TASK ACCOMPLISHMENT INVENTORY
Comprehension:
"The same as"
"Different from (than)"

TEST DATE ______________________
Month Day Year

EXAMINER ______________________

DIRECTIONS	CORRECT	INCORRECT
Arrange a grouping of several colors of pegs. Hold up a peg and say: "Find a peg that is the same color as this one."		
"Find a peg that is a different color from (than) this one."		
Arrange grouping of 3 or 4 beads - same color and shape but of different sizes. Hold up a bead and say: "Find a bead that is the same size as this bead."		
"Find a bead that is a different size from (than) this bead."		
Arrange a grouping of parquetry blocks differing only in shape. Hold up a block and say: "Find a block that is the same shape as this block."		
"Find a block that is a different shape from (than) this block."		

COMMENTS:

NNS
9/69

THIS INVENTORY IS TO EVALUATE THE CHILD'S COMPREHENSION OF TERMS OF RELATIVE LOCATION

Equipment:

A small box with these objects in it: a small plastic figure such as a "Gumby," a small car, a small doll, three blocks. Any object the child might enjoy playing with can also be used.

Procedure:

Give the child a direction to place an object in a specified location or position. He should be able to follow the direction exactly. Examples: *Put the doll under the chair. Put the car behind the box.*

Comments:

Use the comments column to note the number of attempts at testing or any information useful in understanding the evaluation.

To assure that testers evaluate the intended concepts, suggested directions are on the inventory sheet. Objects other than these may be used.

Some of these relational words have more than one meaning. Although children need to know all the meanings, testing for all of them would require an overlong test. Because of this, rather arbitrary selections were made of the specific words and meanings to be tested. For example, the words "in," and "inside," carry slightly different meanings, as do the words "out of," and "outside." The key conceptual elements, however, are "in" and "out." "Inside" and "outside" are listed because it is easier to formulate directions using these words: *Put the doll inside the box*, or *Put the car outside the box.*

Top, middle, and bottom can refer to objects in a vertical plane, such as the position of a particular block in a stack of blocks. They can also refer to an object in the horizontal plane, as the top or bottom of a sheet of paper on which the child is drawing. Evaluating the vertical plane using three blocks is easier as it is quite clear which block is on top, which in the middle, and which on the bottom. *Point to the block on the top*, or *Point to the block in the middle.* Similarly, "over," "under," "on," and "off," have several connotations, but only one will be evaluated.

TASK ACCOMPLISHMENT:

Relative Location -
Comprehension

NAME ______________________

DATE ______________________
Month Day Year

EXAMINER ______________________

DESIRED LOCATION	COMPREHENSION (motor response)	
	Correct	Incorrect
in front of - "Put Gumby in front of you."		
on - "Put the car on the table."		
behind - "Put Gumby behind you."		
inside - "Put the doll inside the box."		
over - "Put Gumby over your head."		
middle - "Point to the block in the middle."		
outside - "Put the doll outside the box."		
bottom - "Point to the block on the bottom."		
under - "Put the doll under the table."		
off - "Take the car off the table."		
top - "Point to the block on the top."		
between - "Put Gumby between the car and the box."		

COMMENTS:

NNS
9/69

THIS INVENTORY IS TO EVALUATE PRODUCTION OF THE TERMS OF RELATIVE LOCATION

Equipment:

A small box in which the following objects may be placed: a small plastic figure such as a Gumby, a small car, a small doll and three blocks. Other objects the child might enjoy playing with can be used.

Procedure:

The tester places an object in a particular relationship to another. The child should be able to express the relationship. Example: *Where is Gumby?* The child responds, *Gumby is under the chair,* or *Under the chair.* Obtaining a sampling of the child's ability to express certain relationships is difficult, at best. If the child answers with an appropriate verbal response other than the one being evaluated, e.g. *Gumby is on the floor,* it is not counted wrong. The tester may attempt to elicit the desired relationship, *Can you say it another way?* Or the tester may go on to another item and return later, perhaps with other objects.

Comments:

Because many of the words being evaluated have several meanings, sample questions are listed to assure that testers evaluate the intended concept. (See the Inventory or comprehension for a more complete discussion.) Objects other than those suggested may be used.

Use the comments column to note the number of attempts at testing which were made or any other pertinent information. For example, if a child replies that an object held over the examiner's head is *above your head,* it should be noted. If a child always replies with a sentence, or with only the key word, this information should also be noted.

CHILD'S NAME ______________________

TASK ACCOMPLISHMENT:
RELATIVE LOCATION - Production

TEST DATE ______________________
Month Day Year

EXAMINER ______________________

DESIRED RELATIONSHIP (Place the object in position; then ask question)	PRODUCTION (verbal response)	
	correct	incorrect
front - Place Gumby in front of the child. "Where is Gumby?"		
on - Place the car on the box. "Where is the car?"		
behind - Place the doll behind the box. "Where is the doll?"		
inside - Place the car inside the box. "Where is the car?"		
over - Hold Gumby over the child's head. "Where is Gumby?"		
middle - Point to block in center of stack. "Where is this block?"		
outside - Take car out of the box. "Where is the car now?"		
bottom - Point to the block on the bottom of the stack. "Where is this block?"		
under - Hold Gumby under a chair. "Where is Gumby?"		
off - Remove the box from the table. "What did I do with the box?"		
top - Point to the block on the top of the stack. "Where is this block?"		
between - Put the doll between the box and the car. "Where is the doll?"		

COMMENTS:

NNS
9/69

THIS INVENTORY IS TO EVALUATE COMPREHENSION OF THE TERMS OF RELATIVE SIZE

Equipment:

A flat box for holding the objects gathered for the inventory, and the following objects for evaluating:*

big & little - 3 red flannel triangles of varied size (nesting cups, color rings)

large & small - 3 nesting cups of varied size (color cone rings, flannel shapes, plastic squares)

long & short - 3 dowel rods of varied length (pieces of yarn, building blocks)

tall & short - 3 towers made with cubes (dowel rods, rods from arithmetic devices)

thick & thin - Property Blocks from the Judy Company (unit blocks in two thicknesses)

wide & narrow - Building blocks - unit blocks and a pillar (half as wide as unit block)

*Note: The objects in parentheses are others that might be used. The terms long and short are restricted to horizontal comparisons. Tall and short are restricted to vertical comparisons. Large and small, big and little, are restricted to items which change in all dimensions in space (as a larger and smaller ball) or items which vary in the same place (color rings, plastic squares).

Procedure:

Place the 2 or 3 objects (depending on age of the child) to test concept in front of the child. Say, *Hand me the largest cup*, or *Which tower is taller?*, *Point to the shorter block.* Use only the comparative terms for three-year old children, comparative and superlative for older children. Otherwise, the inventory is quite long for the younger child. Thick & thin, wide & narrow, are placed at the end of the inventory, so they may be omitted for younger children, or those with language deficiencies. Do not go immediately from comparative to superlative column using the same dimensions of size. Instead, complete the comparative column, then start on the superlative.

Comments:

Please use the comments column to record the number of attempts that were made to test the child, or other conditions under which the inventory was taken. For example, it may sometimes be necessary for the tester to observe while the child interacts with a teacher using the inventory items.

CHILD'S NAME ____________________

TASK ACCOMPLISHMENT:
Comprehension of the terms
of Relative Size

TEST DATE ____________________
Month Day Year

EXAMINER ____________________

POSITIVE	COMPARATIVE (ER)		SUPERLATIVE (EST)	
	correct	incorrect	correct	incorrect
large				
long				
small				
short				
big				
little				
tall				
* thick				
narrow				
thin				
wide				

COMMENTS:

VIII. PERSONNEL

(Because this report covers portions of two instructional years and a summer program all personnel are listed. Not all of these people were involved at the same time. Some were temporary or part time to meet special demands, such as testing or typing. Because of the close coordination of the research and development program with the state funded instructional program, all staff is listed, regardless of source of support.)

Project Director..................................Dr. Edward J. Kelly

Director of Instruction...........................Oralie McAfee

Research Analysts

Dr. Eric Strohmeyer
Dr. Beatrice Heimerl

Psychologists (Testing)

Dr. Darrell Anderson
Dr. Elizabeth Rave

Consultants

Dr. Keith Osborne - Professor of Education and Child Development, University of Georgia, Athens, Georgia.

Dr. Courtney Cazden - Harvard Graduate School of Education, Cambridge, Massachusetts.

Dr. David Wickens - DARCEE Home Visitation Program. John F. Kennedy Center for Research on Education and Human Development.

Dr. Dale Nebel - Associate Professor of Elementary Education, Colorado State College, Greeley, Colorado.

Mr. John Maurelli - Research Associate, Institute for Development of Human Resources, College of Education, University of Florida, Gainesville, Florida.

Mr. Ronald Warner - Typing Booth. Program Assistant, Far West Lab, Berkeley, California.

Teaching Staff

Mrs. Oralie McAfee
Mrs. Clara Lee Clark
Mrs. Eugenia Black Dixon
Mrs. Jane Barnes
Miss Mary Martinez
Mr. Joel Valdez
Mrs. Alice Leal
Mr. Edward Robinson

Testing Staff

Mrs. Gloria Arnold, Coordinator
Mrs. Evelyn Ward
Mr. Bob Segerstrom
Mr. Mike Basham
Mrs. Carol Kelly
Miss Evelyn Rudy
Mr. Lon Vickers
Mr. Tom Thompson
Mr. Jim Lowther

Mobile Instruction Library

Mr. Carlos Leal
Mr. Carl Chiko
Mrs. Angela Espinosa
Mrs. Ruth Gomez
Mrs. Josie Damian
Mrs. Tillie Martinez

Secretarial

Mrs. Carolyn Holmes
Mrs. Delores Sawatzsky
Mrs. Violet Soto
Mrs. Margaret Singer
Mrs. Louise Senkbeil
Mr. Howard Russell
Mrs. Erna Chiko
Miss Elizabeth Greer

Supporting Services:

Lunch Assistant

Mr. Paul Salas

Bus Drivers

Mr. Dennis Thompson
Mr. Robert Munoz
Mr. Charles Briggs

Students

Dr. Macke Williams - Doctoral Study
Mrs. Christine Campanella - CSC Honors Program
Mrs. Hope Stevenson - CSC Student Field Experiences

Health Services

The Weld County Health Department provided immunizations, tine tests, home visits as needed, and physical examinations, through:

Mrs. Margaret Fluke, R.N.
Edgar M. Cleaver, M.D.

Volunteer Help

In addition to parents, the following individuals and organizations contributed time, effort, and materials.

John Evans Junior Honor Society
Girl Scout Troop 180
Mr. & Mrs. John Wheeler
Mr. Larry Scott
Mrs. Helen Williams
Mrs. Lorenzo Martinez
Mr. & Mrs. Stow Witwer, Jr.
Mrs. Jerry Weil
Mrs. Gene McCornack